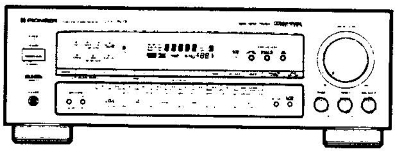
Service Manual

PIONEER

The Art of Entertainment



ORDER NO.
ARP2855

AUDIO/VIDEO STEREO RECEIVER

VSX-D503S

VSX-D513S

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	The voltage can be converted by the following method.
	VSX−D503S	VSX−D513S		
KU	○	—	AC120V	—
KUXJ	○	—	AC120V	—
KC	—	○	AC120V	—
KCXJ	—	○	AC120V	—
SD	○	—	AC110V/120−127V/220V/240V	With the voltage selector
SDXJ	○	—	AC110V/120−127V/220V/240V	With the voltage selector

- For the following: VSX−D503S/KUXJ and SDXJ; VSX−D513S/KCXJ, refer to page 66.
- The " S " at the end of the model number indicates that a programable remote control unit is supplied.

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

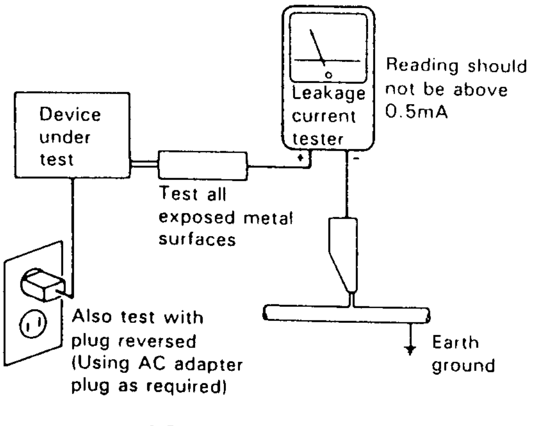
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Leakage current tester
Reading should not be above 0.5mA
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

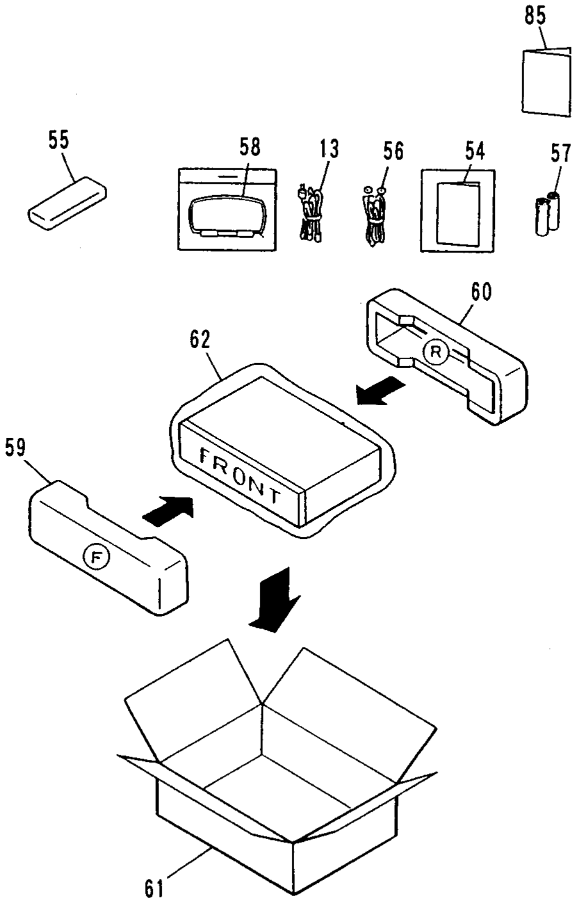
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List of Exterior and Packing

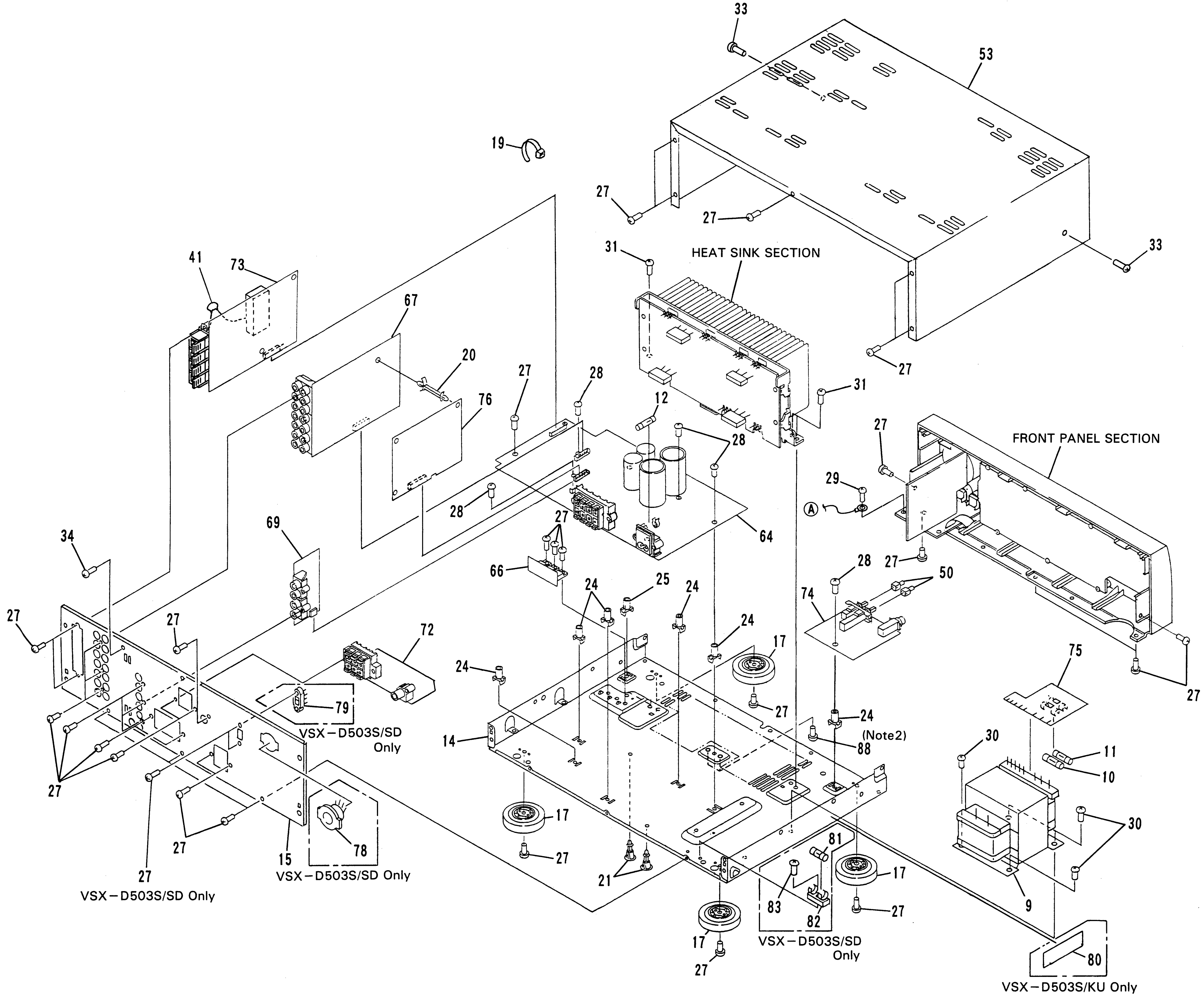
Mark	No.	Description	Parts No.
⚠	1	TRANSISTOR (Q3)	2SA1302
⚠	2	TRANSISTOR (Q4)	2SA1302
⚠	3	TRANSISTOR (Q6)	2SA1302
⚠	4	POWER TRANSISTOR (Q8)	2SA1803
⚠	5	TRANSISTOR (Q1)	2SC3281
⚠	6	TRANSISTOR (Q2)	2SC3281
⚠	7	TRANSISTOR (Q5)	2SC3281
⚠	8	POWER TRANSISTOR (Q7)	2SC4688
⚠	9	POWER TRANSFORMER (T1) (Except VSX−D503S/SD)	ATS1519
⚠	9	POWER TRANSFORMER (T1) (For VSX−D503S/SD)	ATS1520
⚠	10	FUSE (4A/125V, FU3)	AEK−125
⚠	11	FUSE (4A/125V, FU4)	AEK−125
⚠	12	FUSE (8A/125V, FU1) (Except VSX−D503S/SD)	AEK1002
⚠	12	FUSE (4A/125V, FU1) (For VSX−D503S/SD)	AEK−125
⚠	13	AC POWER CORD (Except VSX−D503S/SD)	ADG1126
⚠	13	AC POWER CORD (For VSX−D503S/SD)	ADG1129
NSP	14	CHASSIS (MTL)	ANA1212
	15	REAR PANEL (MTL) (Except VSX−D503S/SD)	ANC2166
	15	REAR PANEL (MTL) (For VSX−D503S/SD)	ANC2167
NSP	16	HEAT SINK	ANH1460
	17	LEG ASSY	AMR2633
	18	VOLUME HOLDER (MTL)	ANG1901
	19	NYLON BINDER	AEC−093
NSP	20	PCB SUPPORT	AEC1013
NSP	21	PCB HOLDER	AEC1097
	22	SHEET	AEE1014
	23	....	
NSP	24	PCB MOULD	AMR1525
NSP	25	PCB MOULD	AMR2115
	26		
	27	SCREW	ABA−298
	28	SCREW	ABA1018
	29	SCREW	ABA1024
	30	SCREW (STEEL)	ABA1053
	31	SCREW	ABA1147
	32	SCREW	ABA1082
	33	SCREW	BBZ30P080FZK
	34	SCREW	BCZ30P080FMC
	35	SCREW	BPZ26P080FMC
	36	NUT	NK90FUC
	37	FRONT PANEL (PLS) (Except VSX−D513S/KC)	AMB2228
	37	FRONT PANEL (PLS) (For VSX−D513S/KC)	AMB2486
	38	DISPLAY PANEL (PLS)	AAK2561
	39	SASH (PLS)	AAK2445
	40	SELF−LIGHT BUTTON	AAD2538
⚠	41	CERAMIC CAPACITOR (C1)	CKDYX104M25
	42	SASH S (PLS)	AAP1368
	43	NAME PLATE	PAM1608
NSP	44	LED LENS	PNW2019
	45	ROUND KNOB L (PLS)	AAB1340
	46	ROUND KNOB M (PLS)	AAB1341
	47	FUNCTION BUTTON (PLS)	AAD2412
	48	HINGE BUTTON A (PLS)	AAD2536
	49	HINGE BUTTON B (PLS)	AAD2537
	50	SPEAKER BUTTON (PLS)	AAD2416
	51	TACT BUTTON (PLS)	AAD2417
	52	POWER KNOB	AAD2418
	53	BONNET CASE (MTL)	ANE1431
	54	OPERATING INSTRUCTIONS (English) (Except VSX−D513S/KC)	ARB1465
	54	OPERATING INSTRUCTIONS (English and French) (For VSX−D513S/KC)	ARE1298
	55	REMOTE CONTROL UNIT (CU−VSX084) (Except VSX−D513S/KC)	AXD1385
	55	REMOTE CONTROL UNIT (CU−VSX082) (For VSX−D513S/KC)	AXD1384
	56	FM ANTENNA	ADH1017
NSP	57	BATTERY (LR03, AAA) (Except VSX−D513S/KC)	AEX1006
NSP	57	BATTERY (LR6, AA) (For VSX−D513S/KC)	AEX1007
	58	LOOP ANTENNA (L8041)	ATB1009
	59	FRONT PAD (PS)	AHA2029
	60	REAR PAD (PS)	AHA2030
	61	PACKING CASE (For VSX−D503S/KU)	AHD2744
	61	PACKING CASE (For VSX−D503S/SD)	AHD2746
	61	PACKING CASE (For VSX−D513S/KC)	AHD2745
	62	PACKING SHEET	AHG1016

Mark	No.	Description	Parts No.
	63	....	
	64	MOTHER ASSY (Except VSX–D503S/SD)	AWZ5372
	64	MOTHER ASSY (For VSX–D503S/SD)	AWZ5441
	65	FRONT ASSY (Except VSX–D503S/SD)	AWZ5371
	65	FRONT ASSY (For VSX–D503S/SD)	AWZ5440
	66	REG. ASSY	AWZ5373
	67	FUNC ASSY	AWZ5379
	68	POWER. AMP ASSY	AWZ5378
	69	VIDEO ASSY	AWZ5381
	70	VOL ASSY	AWZ5383
	71	TONE ASSY	AWZ5382
	72	R, C. SP ASSY	AWZ5374
	73	FM/AM TUNER MODULE	AXQ1012
	74	H. PHNE, SP. SW ASSY	AWZ5384
	75	TRANS ASSY (Except VSX–D503S/KU)	AWZ5380
	75	TRANS ASSY (For VSX–D503S/KU)	AWZ5720
	76	PROLOGIC • SFC MODULE	AXQ1024
	77	....	
⚠	78	VOLTAGE SELECTOR (S1) (VSX–D503S/SD only)	AKX–507
⚠	79	VOLTAGE SELECTOR (S2) (VSX–D503S/SD only)	AKX1004
	80	65 LABEL (VSX–D503S/KU only)	ORW1069
⚠	81	FUSE (4A/125V, FU2) (VSX–D503S/SD only)	AEK–125
NSP	82	FUSE HOLDER (VSX–D503S/SD only)	AKR1005
	83	SCREW (VSX–D503S/SD only)	ABA1009
	84	....	
	85	OPERATING INSTRUCTIONS (Chinese and Spanish) (VSX–D503S/SD only)	ARC1452
	86	....	
	87	LEAD WIRE (J13)	ADX1915
	88	SCREW	ABA1054

● Packing



- **Exterior**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HEAT SINK SECTION
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FRONT PANEL SECTION
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VSX−D503S/SD Only
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(Note2)
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VSX−D503S/SD Only
VSX−D503S/SD Only
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VSX−D503S/SD Only
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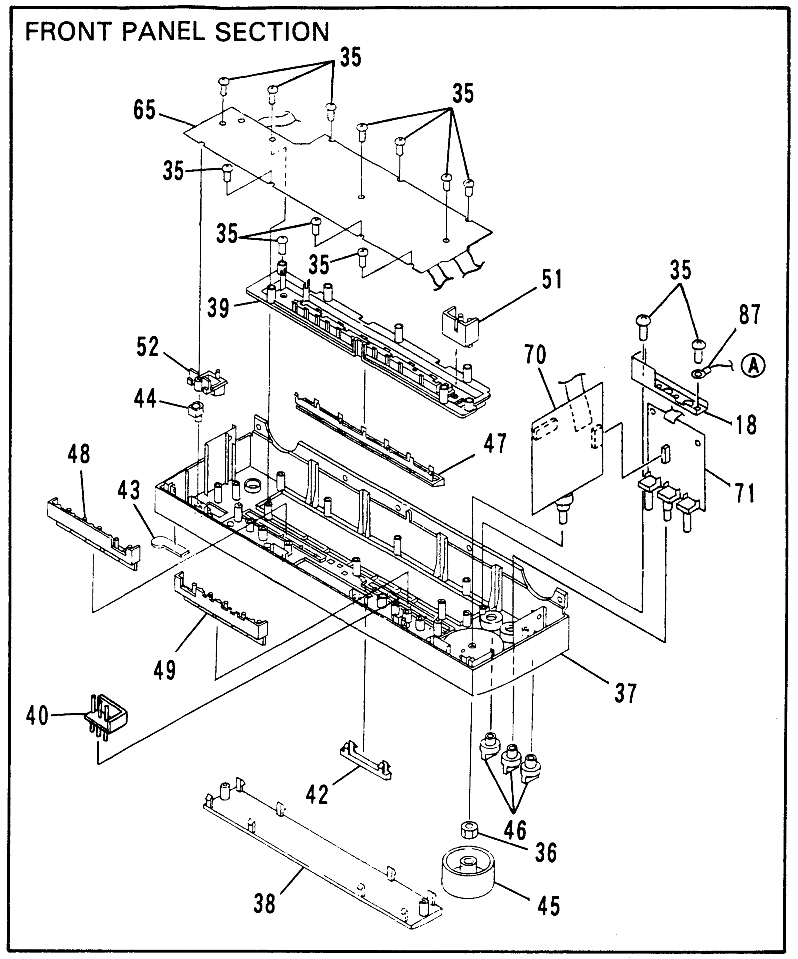
VSX−D503S/KU Only

FRONT PANEL SECTION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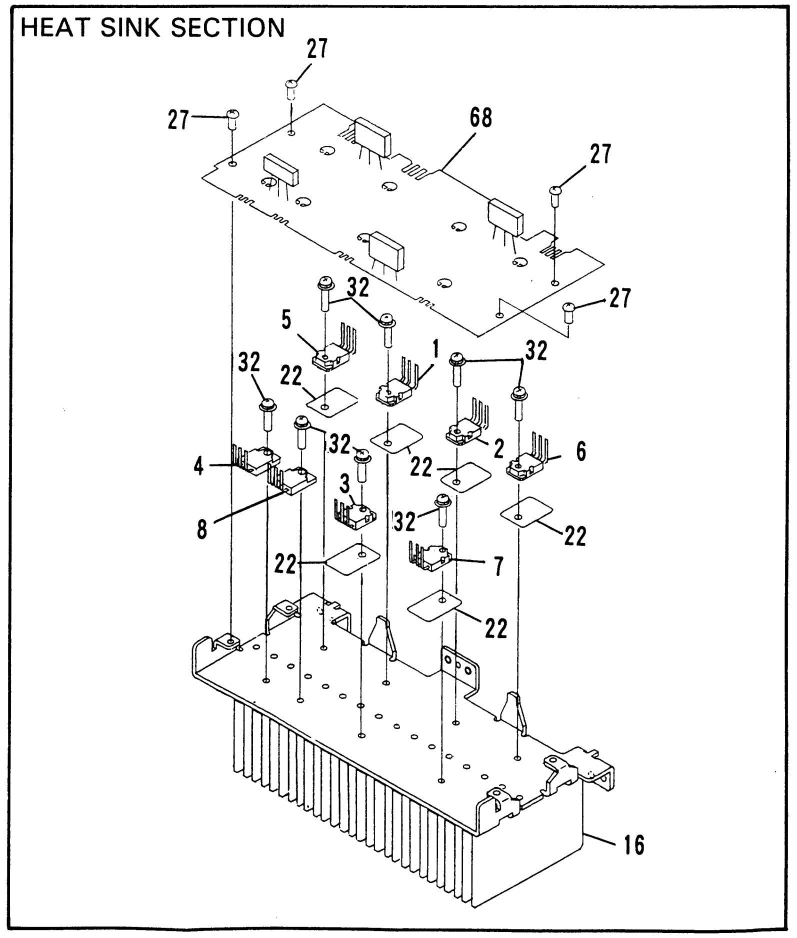
HEAT SINK SECTION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Note 1 : Screws adjacent to ▼ mark on the product are used for disassembly.

Note 2 : Used for heat sink.

3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

3.1 OVERALL SCHEMATIC DIAGRAM

	VSX-D503S/KUXJ VSX-D513S/KCXJ	VSX-D503S/KU VSX-D513S/KC	VSX-D503S/SDXJ	VSX-D503S/SD
FU1	AEK1002(8A)	AEK1002(8A)	REK1066(4A)	AEK-125(4A)
FU2	———	———	REK1066(4A)	AEK-125(4A)
FU3	REK1066(4A)	AEK-125(4A)	REK1066(4A)	AEK-125(4A)
FU4	REK1066(4A)	AEK-125(4A)	REK1066(4A)	AEK-125(4A)
T1	ATS1519-	ATS1519-	ATS1520-	ATS1520-

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   V : Signal voltage at rated output.
   or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH−☐ ON THE SCHEMATIC DIAGRAM:**
   - SCH−☐ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

S1 VOLTAGE SELECTOR
(SD, SDXJ TYPES ONLY)
AC110V/120-127V/220V/240V

S2 VOLTAGE SELECTOR
(SD, SDXJ TYPES ONLY)
AC110-127V/220-240V

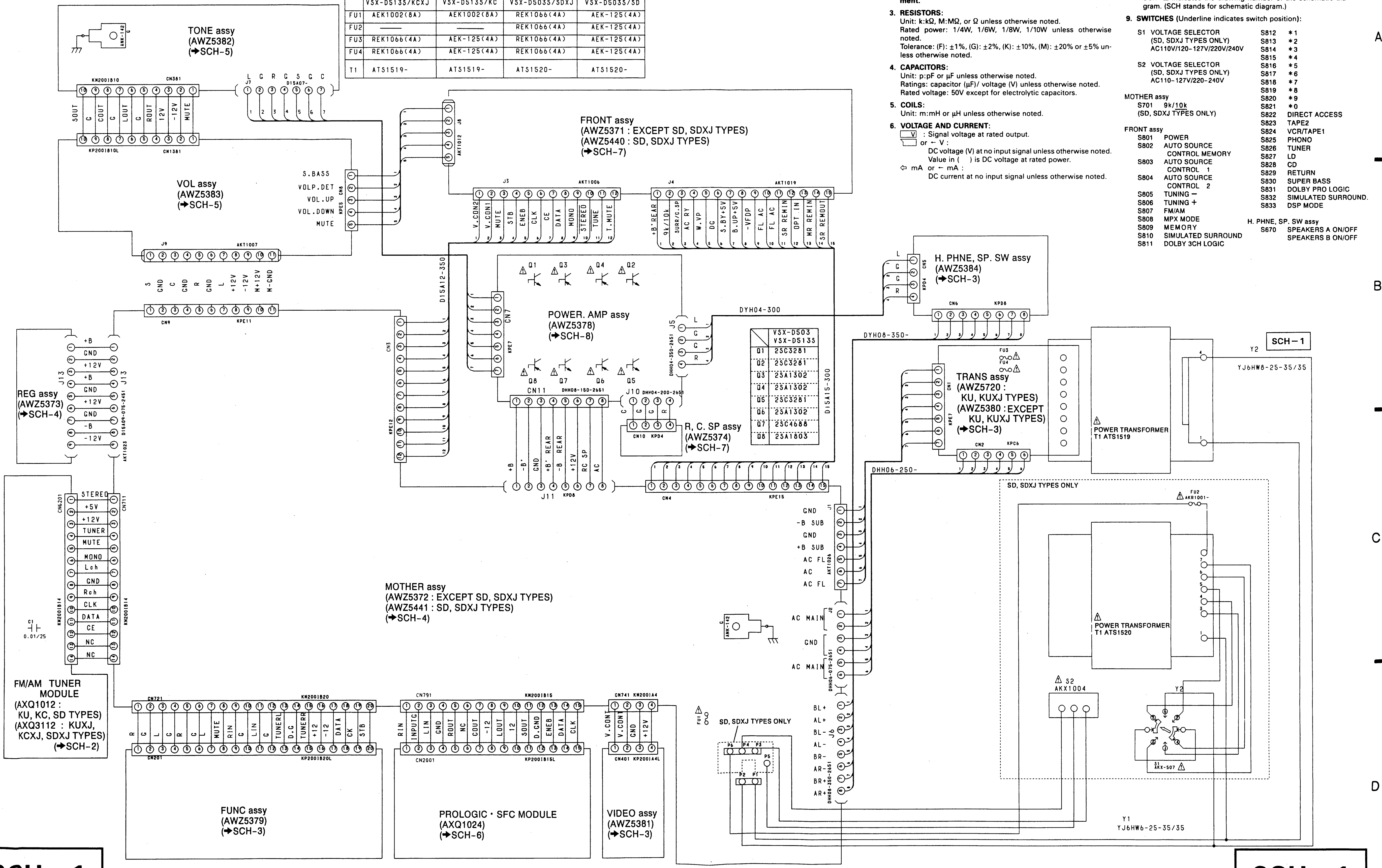
MOTHER assy
S701 9k/10k
(SD, SDXJ TYPES ONLY)

FRONT assy

S801	POWER
S802	AUTO SOURCE CONTROL MEMORY
S803	AUTO SOURCE CONTROL 1
S804	AUTO SOURCE CONTROL 2
S805	TUNING −
S806	TUNING +
S807	FM/AM
S808	MPX MODE
S809	MEMORY
S810	SIMULATED SURROUND
S811	DOLBY 3CH LOGIC
S812	*1
S813	*2
S814	*3
S815	*4
S816	*5
S817	*6
S818	*7
S819	*8
S820	*9
S821	*0
S822	DIRECT ACCESS
S823	TAPE2
S824	VCR/TAPE1
S825	PHONO
S826	TUNER
S827	LD
S828	CD
S829	RETURN
S830	SUPER BASS
S831	DOLBY PRO LOGIC
S832	SIMULATED SURROUND.
S833	DSP MODE

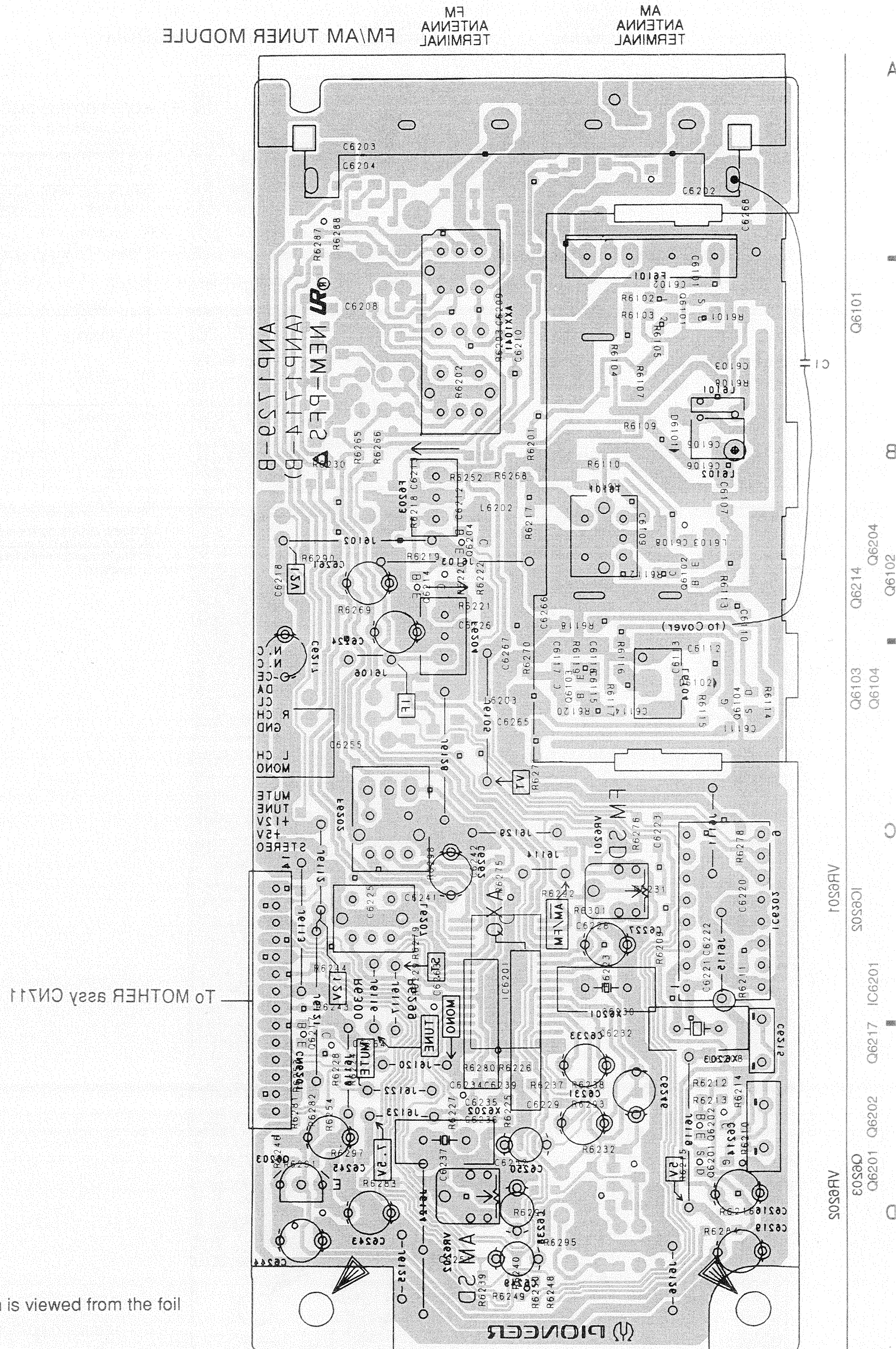
H. PHNE, SP. SW assy

S670	SPEAKERS A ON/OFF SPEAKERS B ON/OFF


TONE assy
(AWZ5382)
(➔SCH-5)
ANK-142
KN2001B10
CN381
SOUT G COUT G LOUT G ROUT 12V -12V MUTE
KP2001B10L
CN1381
L G R G S G C
J7 D15A07-
VOL assy
(AWZ5383)
(➔SCH-5)
S.BASS
VOLP.DET
VOL.UP
VOL.DOWN
MUTE
CN8
KPE5
J9 AKT1007
S GND C GND R GND L +12V -12V N+12V N-GND
CN9 KPE11
FRONT assy
(AWZ5371 : EXCEPT SD, SDXJ TYPES)
(AWZ5440 : SD, SDXJ TYPES)
(➔SCH-7)
J8 AKT1012
J3 AKT1006
V.CON2 V.CON1 MUTE STB ENEB CLK CE DATA MONO STEREO TUNE T.MUTE
J4 AKT1019
+B' REAR 9k/10k SURR/C.SP AC RY W.VP DG S.BY+5V B.UP+5V -VFDP FL AC FL AC SR REMIN OPT IN MR REMIN SR REMOUT
D15A12-350
POWER. AMP assy
(AWZ5378)
(➔SCH-8)
Q1 Q3 Q4 Q2
Q8 Q7 Q6 Q5
CN7 KPE7
CN3 KPE12
CN11 DHH08-150-2651
J10 DHH04-200-2651
J5 DHH04-350-2651
DYH04-300
D15A15-300
L G C G R
C G C G R
R, C. SP assy
(AWZ5374)
(➔SCH-7)
CN10 KPD4
+B -B' GND +B' REAR -B REAR +12V RC SP AC
J11 KPD8
CN4 KPE15
H. PHNE, SP. SW assy
(AWZ5384)
(➔SCH-3)
CN5 KPD4
CN6 KPD8
DYH08-350-
TRANS assy
(AWZ5720 : KU, KUXJ TYPES)
(AWZ5380 : EXCEPT KU, KUXJ TYPES)
(➔SCH-3)
CN1 KPE7
CN2 KPC6
FU3 FU4
POWER TRANSFORMER
T1 ATS1519
SCH−1
Y2
YJ6HW8-25-35/35
DHH06-250-
SD, SDXJ TYPES ONLY
FU2 AKR1001-
POWER TRANSFORMER
T1 ATS1520
S2 AKX1004
Y2
S1 AKX-507
Y1
YJ6HW6-25-35/35
REG assy
(AWZ5373)
(➔SCH-4)
+B GND +12V +B GND +12V GND -B -12V
J13 D15A09-075-2651 AKT1023
MOTHER assy
(AWZ5372 : EXCEPT SD, SDXJ TYPES)
(AWZ5441 : SD, SDXJ TYPES)
(➔SCH-4)
J1 AKT1026
GND -B SUB GND +B SUB AC FL AC AC FL
J2 AC MAIN GND AC MAIN
DHH08-075-2651
J6 DHH08-350-2651
BL+ AL+ BL- AL- BR- AR- BR+ AR+
ANK-142
FU1
SD, SDXJ TYPES ONLY
P6 P4 P3 P5 P2 P1
CN6201 CN711
STEREO +5V +12V TUNER MUTE MONO Lch GND Rch CLK DATA CE NC NC
KN2001B14 KN2001B14
C1 0.01/25
FM/AM TUNER MODULE
(AXQ1012 : KU, KC, SD TYPES)
(AXQ3112 : KUXJ, KCXJ, SDXJ TYPES)
(➔SCH-2)
CN721 KN2001B20
R G L G R G L MUTE RIN G LIN G TUNERL D.G TUNERR +12 -12 DATA CK STB
CN201 KP2001B20L
FUNC assy
(AWZ5379)
(➔SCH-3)
CN791 KN2001B15
RIN INPUTC LIN GND ROUT NC COUT -12 LOUT 12 SOUT D.GND ENEB DATA CLK
CN2001 KP2001B15L
PROLOGIC・SFC MODULE
(AXQ1024)
(➔SCH-6)
CN741 KN2001A4
V.CONT V.CONT GND +12V
CN401 KP2001A4L
VIDEO assy
(AWZ5381)
(➔SCH-3)

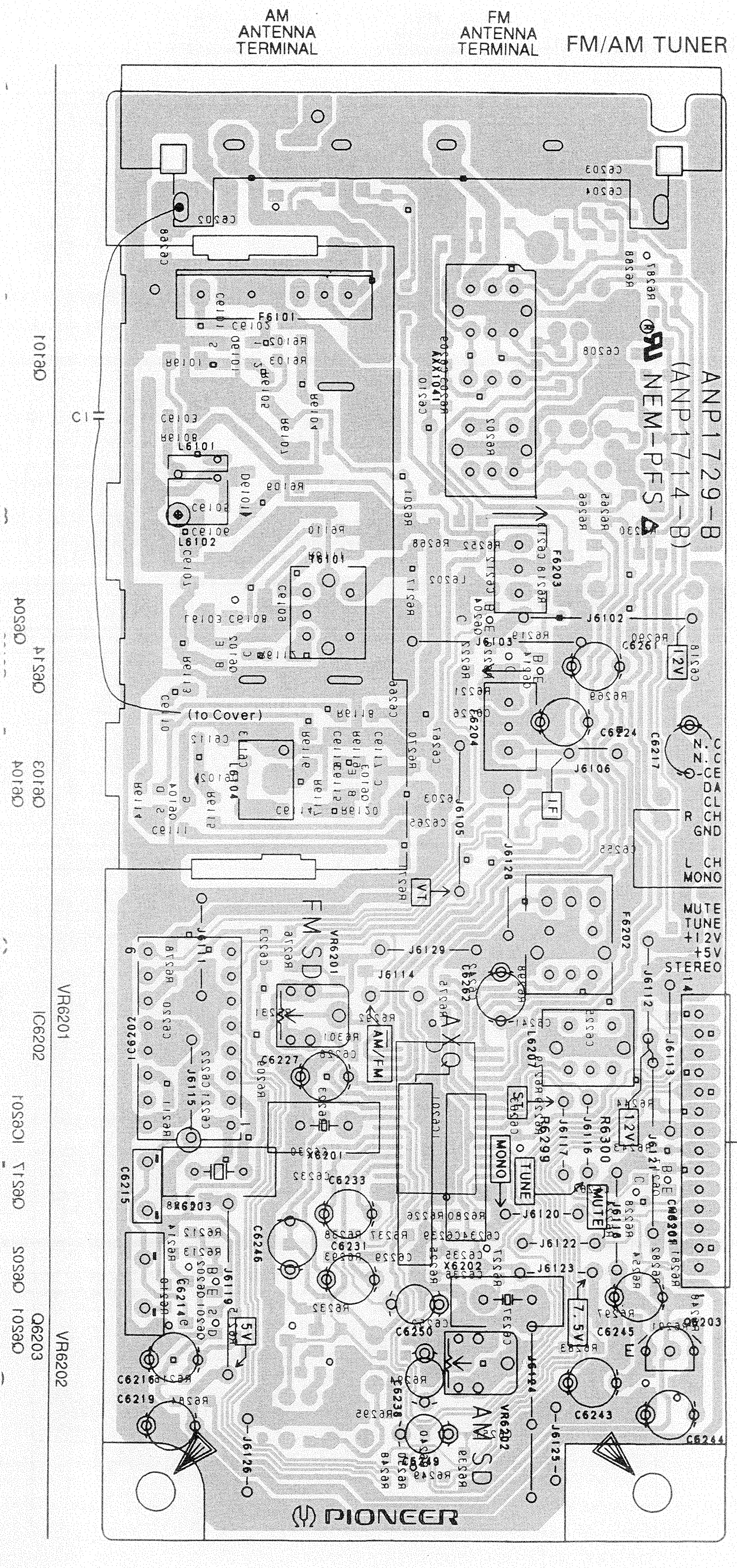
	VSX-D503 VSX-D513S
Q1	2SC3281
Q2	2SC3281
Q3	2SA1302
Q4	2SA1302
Q5	2SC3281
Q6	2SA1302
Q7	2SC4688
Q8	2SA1803

3.2 FM/AM TUNER MODULE


FM/AM TUNER MODULE
FM ANTENNA TERMINAL
AM ANTENNA TERMINAL
To MOTHER assy CN711
ANP1729-B
(ANP1714-B)
NEM-P56
PIONEER
N.C
N.C
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
(to Cover)
FM SD
AM SD
FM/AM
Q6101
Q6214
Q6204
Q6102
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
VR6202

- This diagram is viewed from the foil side.

3.2 FM/AM TUNER MODULE


AM ANTENNA TERMINAL
FM ANTENNA TERMINAL
FM/AM TUNER MODULE
ANP1729-B
(ANP1714-B)
NEM-PFS
(to Cover)
C1
Q6101
Q6104
Q6103
N.C
N.C
CE
DA
CL
R CH
GND
L CH MONO
MUTE
TUNE
+12V
+5V
STEREO
12V
IF
VT
FM SD
AM/FM
MONO
TUNE
MUTE
12V
5V
7.5V
AM SD
VR6201
IC6202
Q6201
Q6205
Q6203
VR6202
To MOTHER assy CN711
PIONEER

NOTE FOR PCB DIAGRAMS:

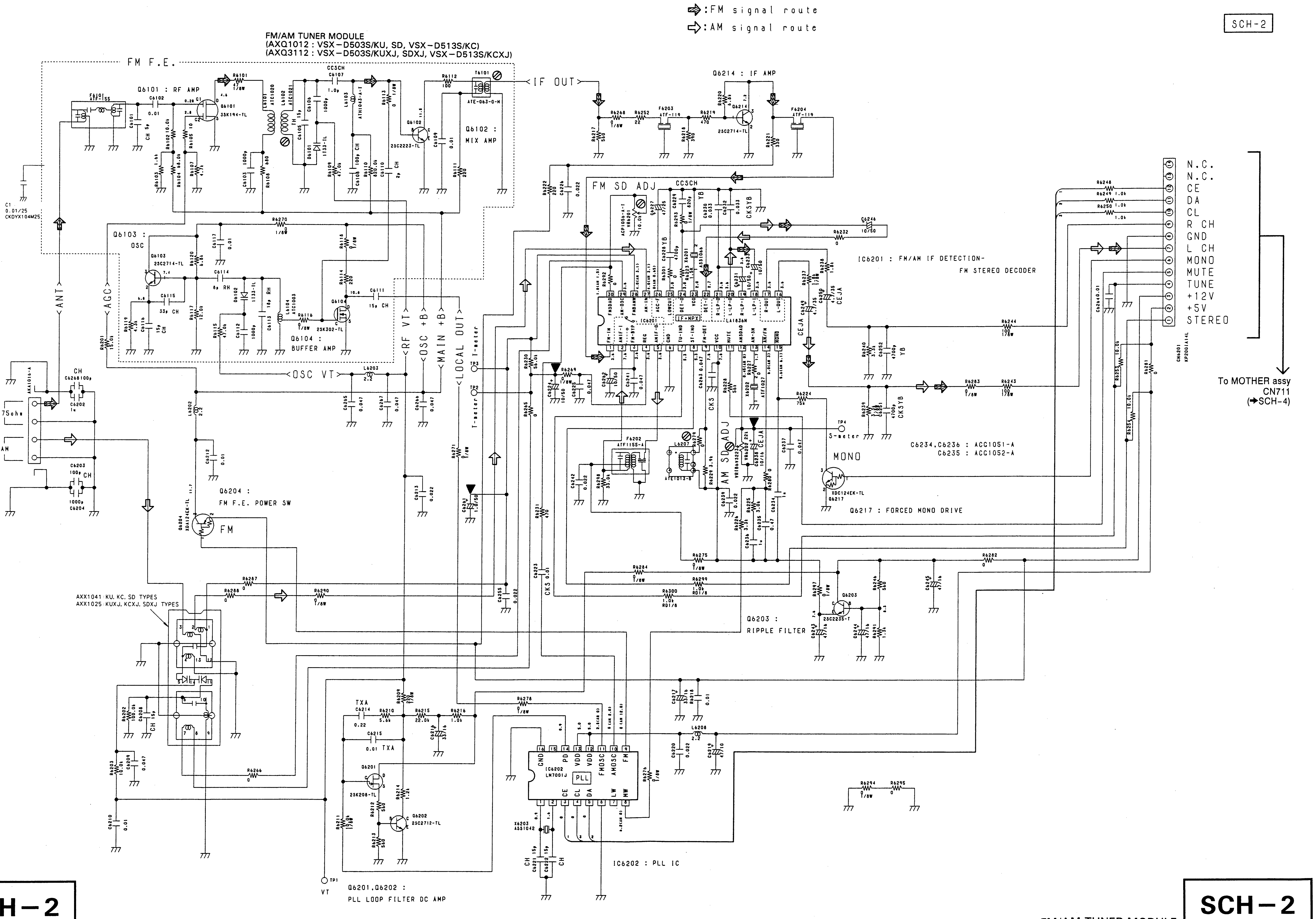
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
E Q504 Q504	Q504 Q504	Transistor
D203 D203	D203	Diode
C513 C513	C513	Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

- This diagram is viewed from the mounted parts side.

SCH-2


:FM signal route
:AM signal route
FM/AM TUNER MODULE
(AXQ1012 : VSX-D503S/KU, SD, VSX-D513S/KC)
(AXQ3112 : VSX-D503S/KUXJ, SDXJ, VSX-D513S/KCXJ)
FM F.E.
Q6101 : RF AMP
Q6101 3SK194-TL
Q6102 2SC2223-TL
Q6102 : MIX AMP
T6101 ATE-063-0-H
<IF OUT>
Q6103 : OSC
Q6103 2SC2714-TL
Q6104 2SK302-TL
Q6104 : BUFFER AMP
<ANT>
<AGC>
<RF VT>
<OSC +B>
<MAIN +B>
<LOCAL OUT>
<OSC VT>
C1 0.01/25 CKDYX104M25
FM 75ohm
AM
Q6204 : FM F.E. POWER SW
FM
AXX1041 KU, KC, SD TYPES
AXX1025 KUXJ, KCXJ, SDXJ TYPES
Q6214 : IF AMP
Q6214 2SC2714-TL
F6203 ATF-119
F6204 ATF-119
FM SD ADJ
CCSCH
CKSYB
IC6201 : FM/AM IF DETECTION-FM STEREO DECODER
LA1836N
F6202 ATF115S-4
AM SD ADJ
CEJA
TP3 T-meter
TP2 T-meter
TP4 S-meter
MONO
Q6217 DTC124EK-TL
Q6217 : FORCED MONO DRIVE
C6234,C6236 : ACG1051-A
C6235 : ACG1052-A
Q6203 : RIPPLE FILTER
Q6203 2SC2235-T
N.C.
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
CN6201 KP200A14L
To MOTHER assy CN711 (→SCH-4)
TXA
Q6201 2SK208-TL
Q6202 2SC2712-TL
TP1 VT
Q6201,Q6202 : PLL LOOP FILTER DC AMP
IC6202 LM7001J
PLL
GND PO VDD VDD FMOSC AMOSC FM
CE CL DA LW MW
X6203 ASS1042
IC6202 : PLL IC

SCH-2

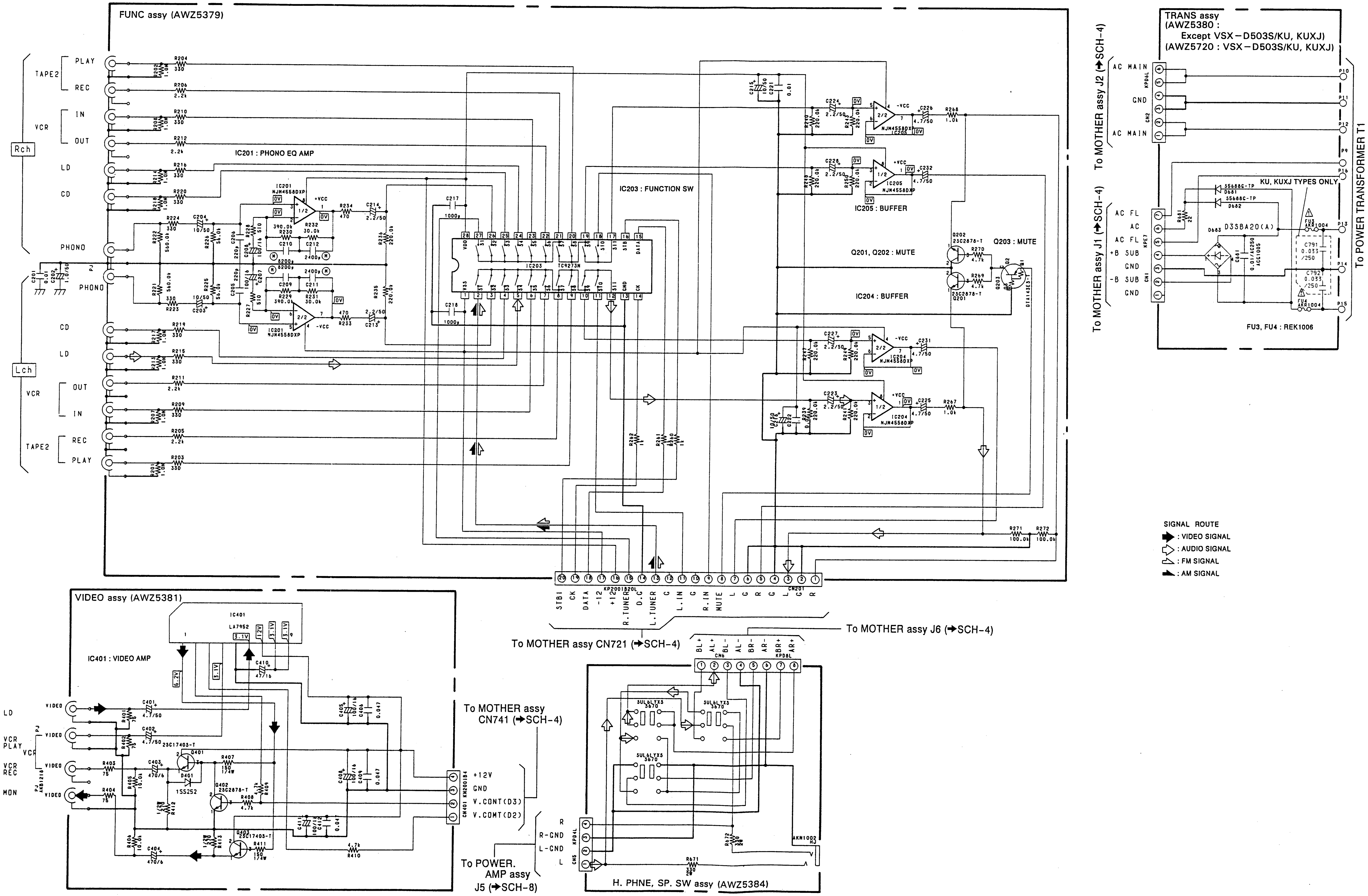
FM/AM TUNER MODULE

SCH-2

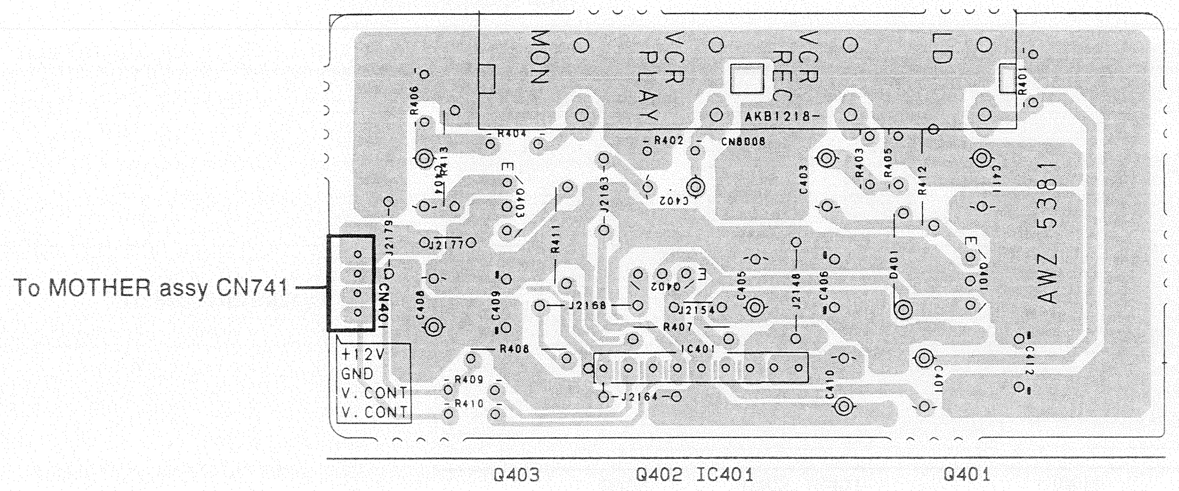
FM/AM TUNER MODULE

3.3 FUNC ASSY, VIDEO ASSY, H. PHNE, SP. SW ASSY AND TRANS ASSY

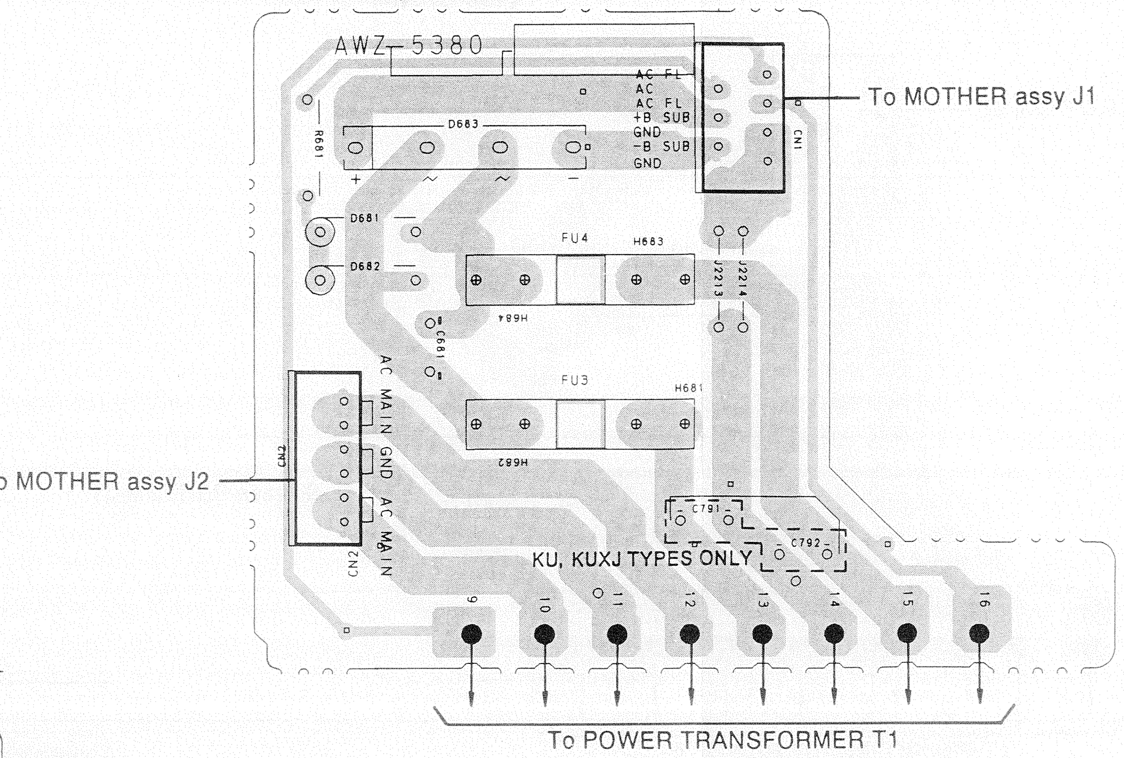
SCH−3


FUNC assy (AWZ5379)
TAPE2
PLAY
REC
VCR
IN
OUT
Rch
LD
CD
PHONO
Lch
IC201 : PHONO EQ AMP
IC201 NJM4558DXP
IC203 : FUNCTION SW
IC203 TC9273N
IC205 : BUFFER
IC204 : BUFFER
Q201, Q202 : MUTE
Q203 : MUTE
2SC2878-T
DTA143ES-T
NJM4558DXP
CN201 KP200120L
STBI
CK
DATA
-12
+12
R.TUNER
D.C
L.TUNER
G
L.IN
R.IN
MUTE
L
R
To MOTHER assy CN721 (➔SCH-4)
To MOTHER assy J6 (➔SCH-4)
BL+
AL+
BL-
AL-
BR-
AR-
BR+
AR+
CN6 KPD8L
TRANS assy
(AWZ5380 :
Except VSX−D503S/KU, KUXJ)
(AWZ5720 : VSX−D503S/KU, KUXJ)
To MOTHER assy J2 (➔SCH-4)
AC MAIN
GND
CN2
KPD4L
To MOTHER assy J1 (➔SCH-4)
AC FL
AC
+B SUB
GND
-B SUB
CN1
KPE7
D681 SS688C-TP
D682 SS688C-TP
KU, KUXJ TYPES ONLY
D683 D3SBA20(A)
FU3 AKR1004
FU4 AKR1004
C791 0.033 /250
C792 0.033 /250
FU3, FU4 : REK1006
To POWER TRANSFORMER T1
P10
P11
P12
P9
P16
P13
P14
P15
SIGNAL ROUTE
: VIDEO SIGNAL
: AUDIO SIGNAL
: FM SIGNAL
: AM SIGNAL
VIDEO assy (AWZ5381)
IC401
LA7952
IC401 : VIDEO AMP
LD
VCR PLAY
VCR REC
MON
VIDEO
AKB1218
2SC1740S-T
2SC2878-T
1SS252
Q401
Q402
Q403
D401
To MOTHER assy CN741 (➔SCH-4)
CN401 KM200184
+12V
GND
V.CONT(D3)
V.CONT(D2)
To POWER. AMP assy J5 (➔SCH-8)
R
R-GND
L-GND
L
CN5 KPD4L
SUL6LYXS 3670
AKN1003
H. PHNE, SP. SW assy (AWZ5384)

VIDEO assy

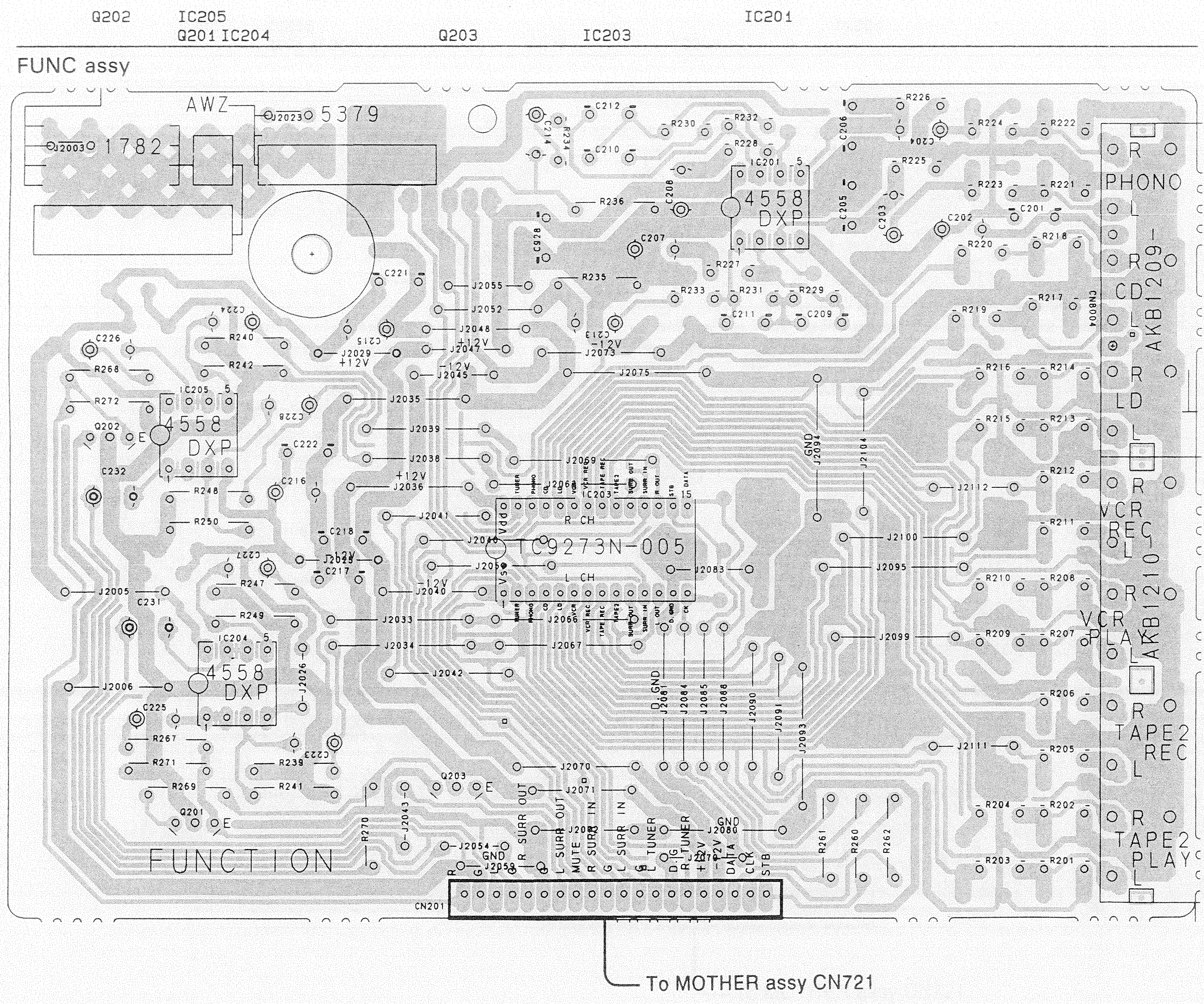

To MOTHER assy CN741
MON
VCR PLAY
VCR REC
LD
AKB1218
CN8008
AWZ 5381
+12V
GND
V. CONT
V. CONT
CN401
IC401
Q403
Q402 IC401
Q401

TRANS assy

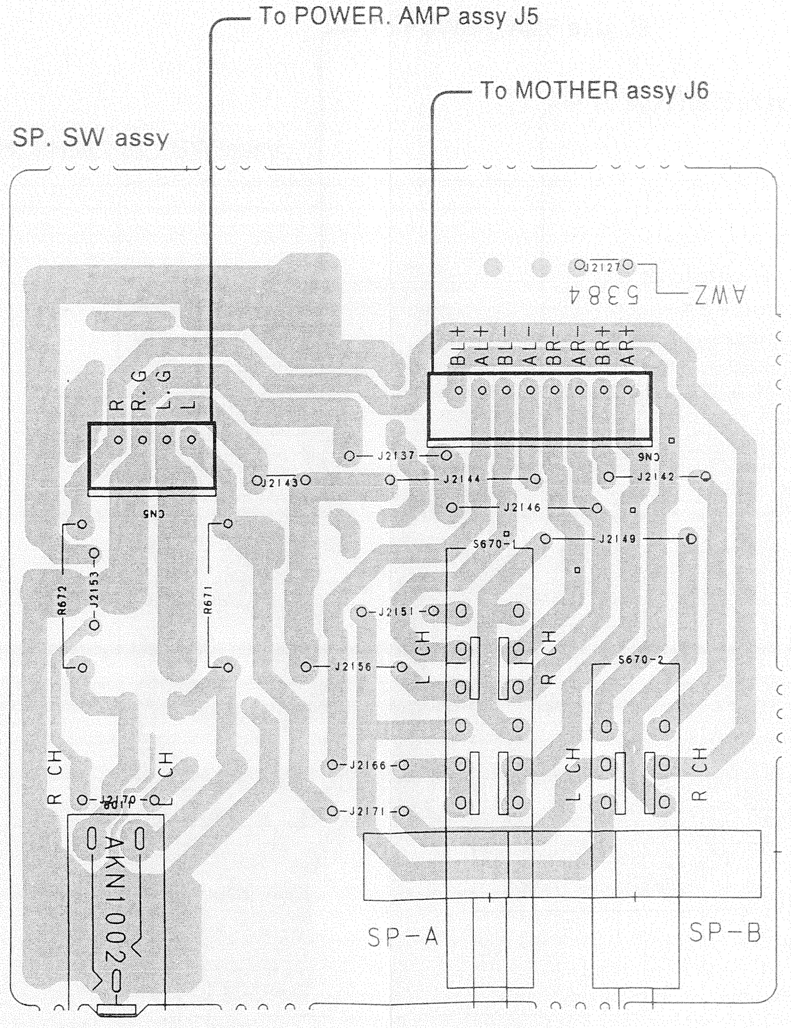

AWZ-5380
AC FL
AC
AC FL
+B SUB
GND
-B SUB
GND
CN1
To MOTHER assy J1
D683
D681
D682
FU4
FU3
H683
H684
H681
H682
To MOTHER assy J2
CN2
AC MAIN
GND
AC MAIN
C791
C792
KU, KUXJ TYPES ONLY
9
10
11
12
13
14
15
16
To POWER TRANSFORMER T1

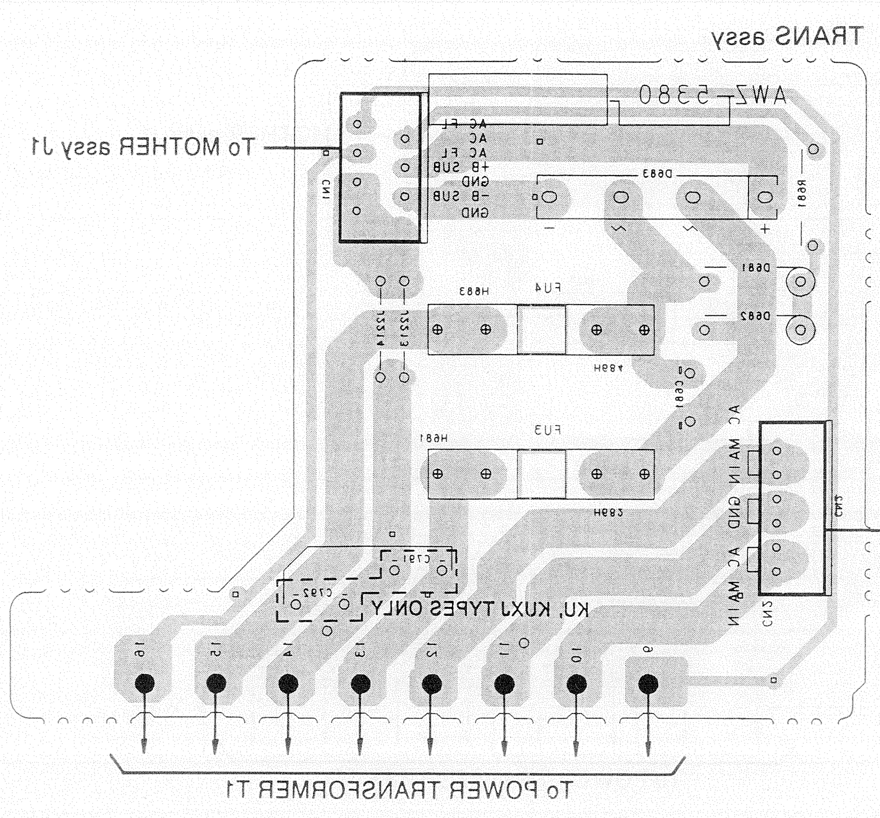
- This diagram is viewed from the mounted parts side.

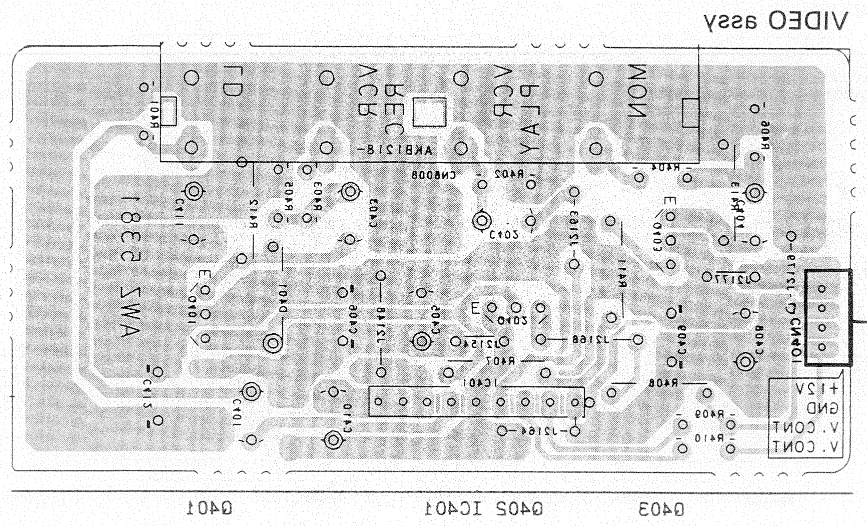
FUNC assy


Q202
IC205
Q201 IC204
Q203
IC203
IC201
AWZ 5379
1782
4558 DXP
TC9273N-005
PHONO
CD
LD
VCR REC
VCR PLAY
TAPE2 REC
TAPE2 PLAY
AKB1209
AKB1210
CN8004
FUNCTION
CN201
To MOTHER assy CN721

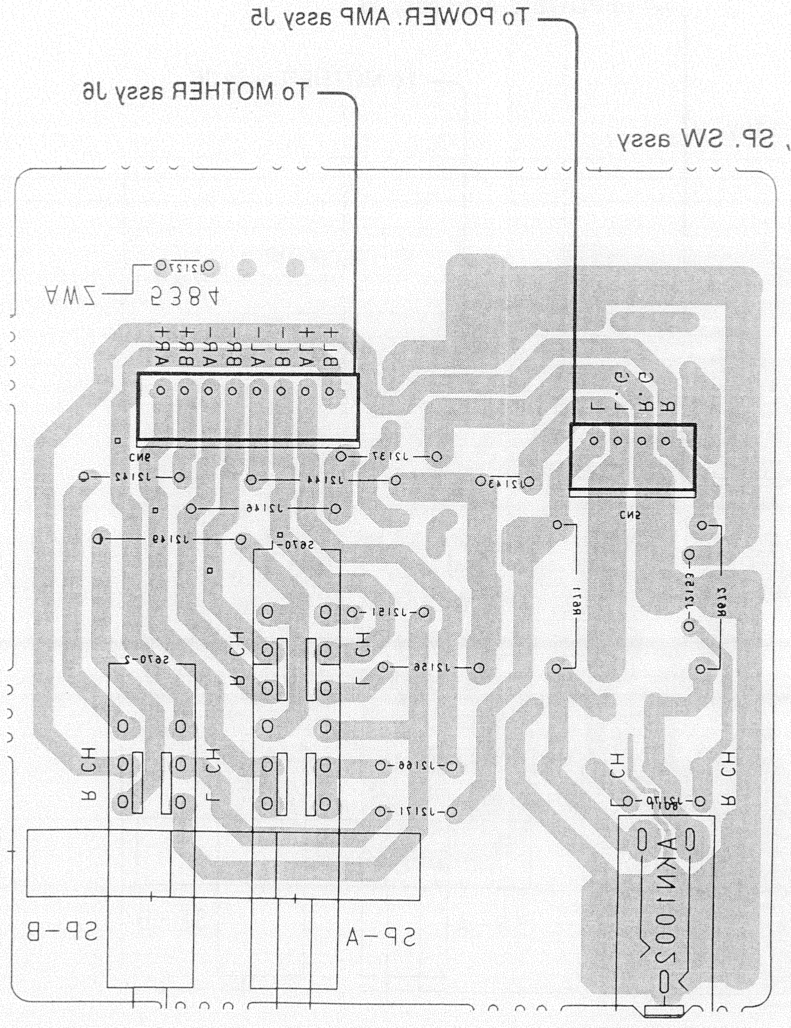
H. PHNE, SP. SW assy

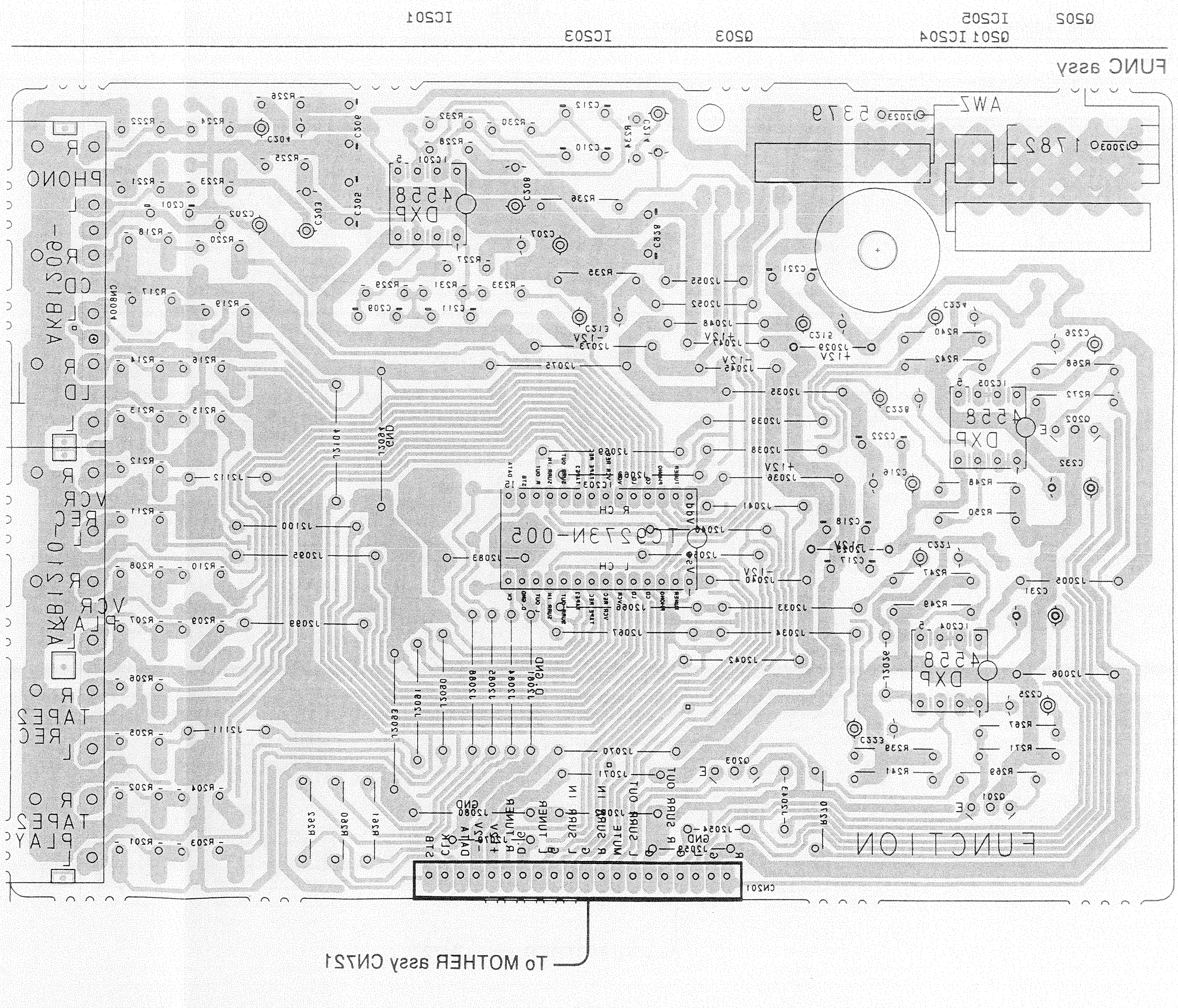

To POWER. AMP assy J5
To MOTHER assy J6
AWZ 5384
R.G
R.G
L.G
L
CN5
BL+
AL+
BL-
AL-
BR-
AR-
BR+
AR+
CN6
S670-1
S670-2
L CH
R CH
AKN1002
SP-A
SP-B


TRANS assy
AWZ-5380
To MOTHER assy J1
To MOTHER assy J2
AC FL
AC FL
+B SUB
GND
-B SUB
GND
CN1
D683
D681
D682
FU4
FU3
H683
H684
H681
H693
AC MAIN
GND
AC MAIN
CN2
C791
C792
KU, KUXJ TYPES ONLY
16
15
14
13
12
11
10
9
To POWER TRANSFORMER T1

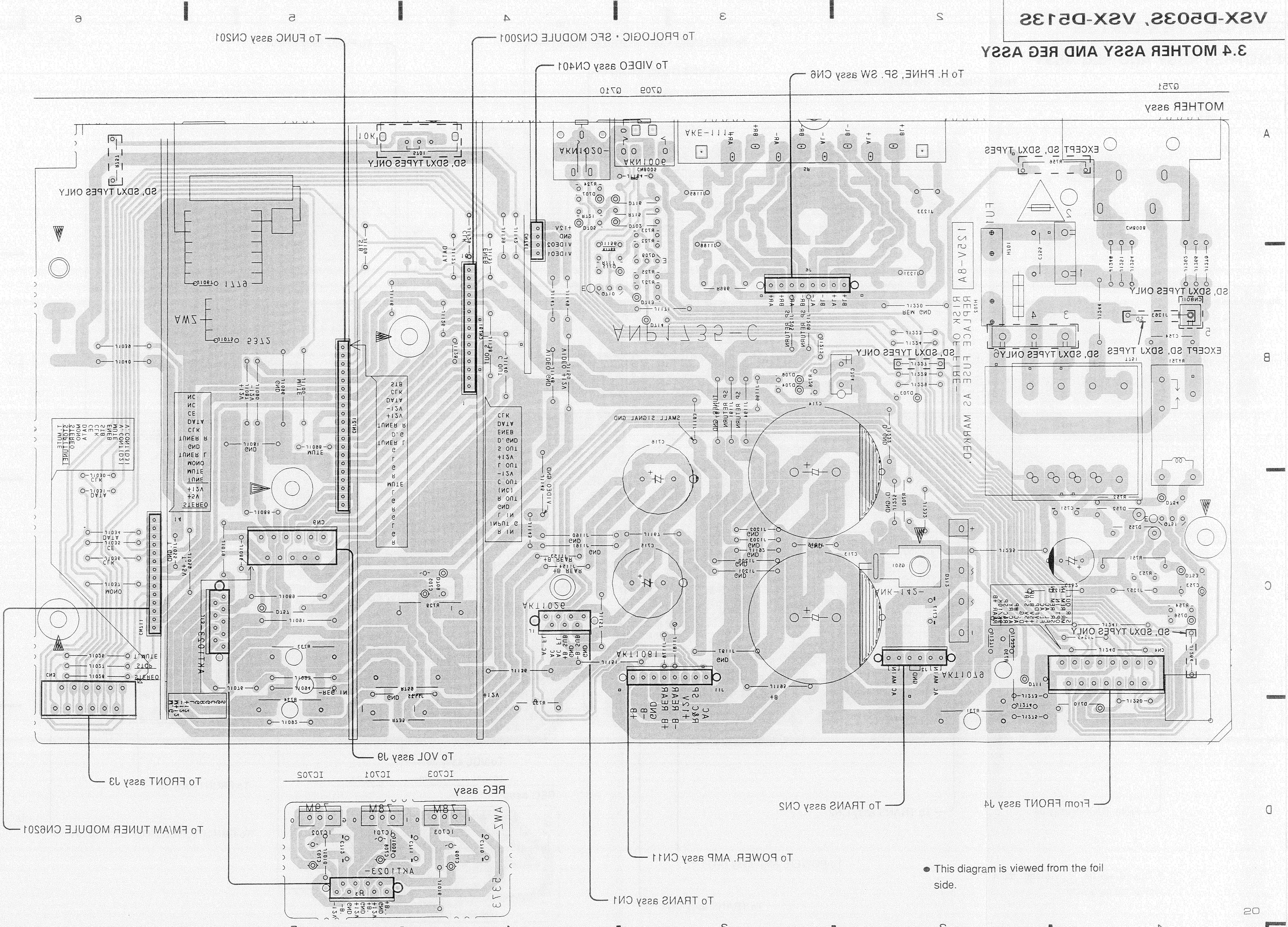

VIDEO assy
LD
VCR REC
VCR PLAY
MON
AKB1218-
CN8008
AWZ 6381
IC401
To MOTHER assy CN741
+12V
GND
V.CONT
V.CONT
Q401
Q402 IC401
Q403

● This diagram is viewed from the foil side.


To POWER. AMP assy J5
To MOTHER assy J6
H. PHNE, SP. SW assy
AWZ-5384
CN5
CN2
R CH
L CH
SP-B
SP-A
AKN1002


IC201
IC203
Q203
IC205
Q201 IC204
Q202
FUNC assy
AWZ-5379
1782
PHONO
CD
LD
VCR REC
VCR PLAY
TAPE2 REC
TAPE2 PLAY
AKB1210-
4558 DXP
LC8273N-005
+12V
-12V
+5V
GND
FUNCTION
CN201
To MOTHER assy CN721

3.4 MOTHER ASSY AND REG ASSY



To FUNC assy CN201
To PROLOGIC · SFC MODULE CN2001
To VIDEO assy CN401
To H. PHNE, SP. SW assy CN6
MOTHER assy
SD, SDX1 TYPES ONLY
EXCEPT SD, SDX1 TYPES
REPLACE FUSE AS MARKED
To VOL assy J9
To FRONT assy J3
To FM/AM TUNER MODULE CN6201
REG assy
IC702
IC701
IC703
To TRANS assy CN2
From FRONT assy J4
To POWER. AMP assy CN11
To TRANS assy CN1

● This diagram is viewed from the foil side.

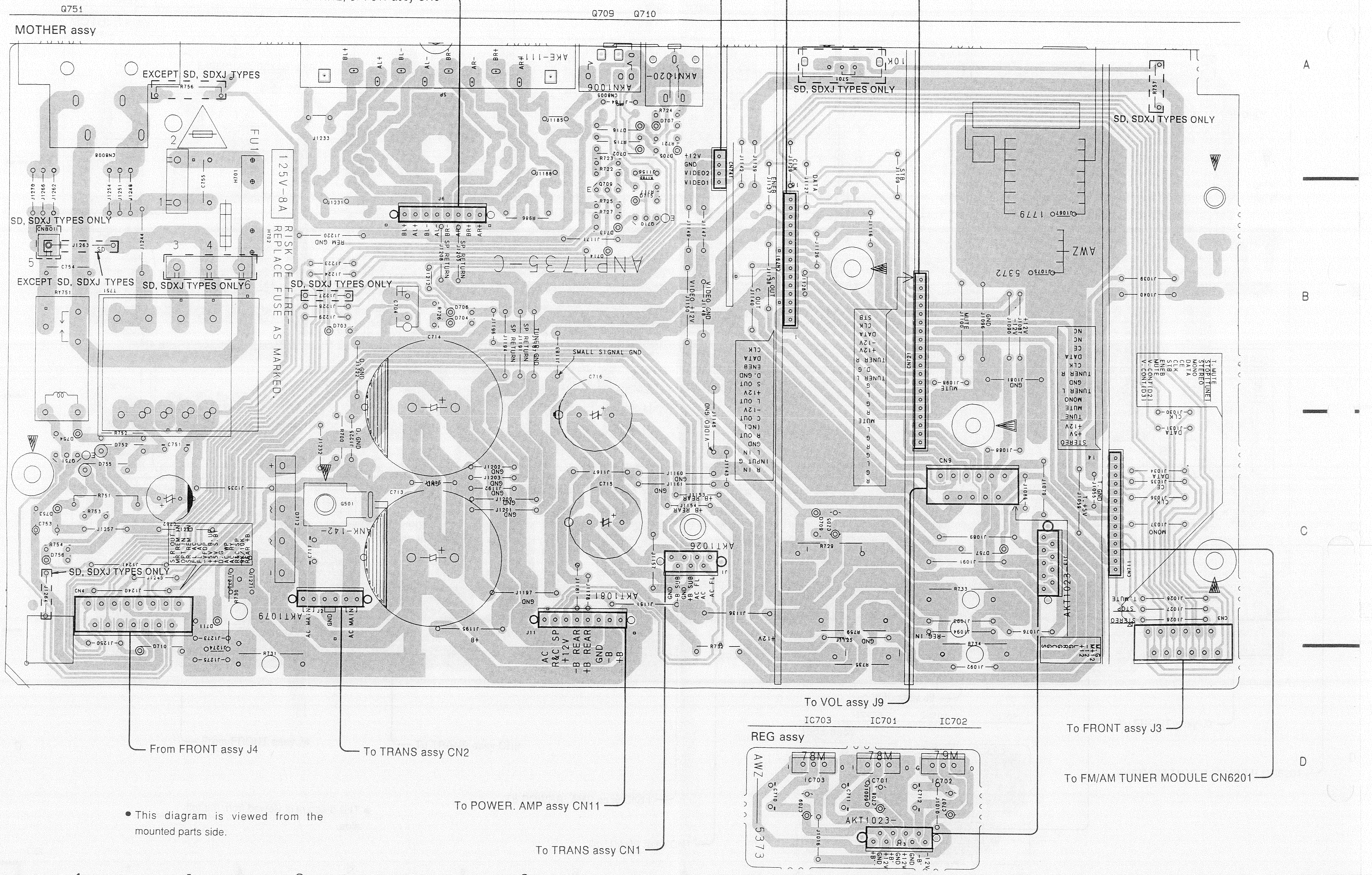
3.4 MOTHER ASSY AND REG ASSY

To PROLOGIC・SFC MODULE CN2001

To FUNC assy CN201

To VIDEO assy CN401

To H. PHNE, SP. SW assy CN6


Q751
Q709
Q710
MOTHER assy
EXCEPT SD, SDXJ TYPES
SD, SDXJ TYPES ONLY
EXCEPT SD, SDXJ TYPES
SD, SDXJ TYPES ONLY
SD, SDXJ TYPES ONLY
SD, SDXJ TYPES ONLY
SD, SDXJ TYPES ONLY
SD, SDXJ TYPES ONLY
125V-8A
RISK OF FIRE-REPLACE FUSE AS MARKED.
ANP1735-C
AWZ-5372
AKE-111
AKN1006
AKN1020
ANK-142
AKT1079
AKT1081
AKT1026
AKT1023
SMALL SIGNAL GND
AC
R&C SP
+12V
-B REAR
+B REAR
GND
-B
+B
AC MAIN
AC MAIN
REG IN
REG assy
IC703
IC701
IC702
78M
78M
79M
AWZ-5373
AKT1023-

To VOL assy J9

To FRONT assy J3

To FM/AM TUNER MODULE CN6201

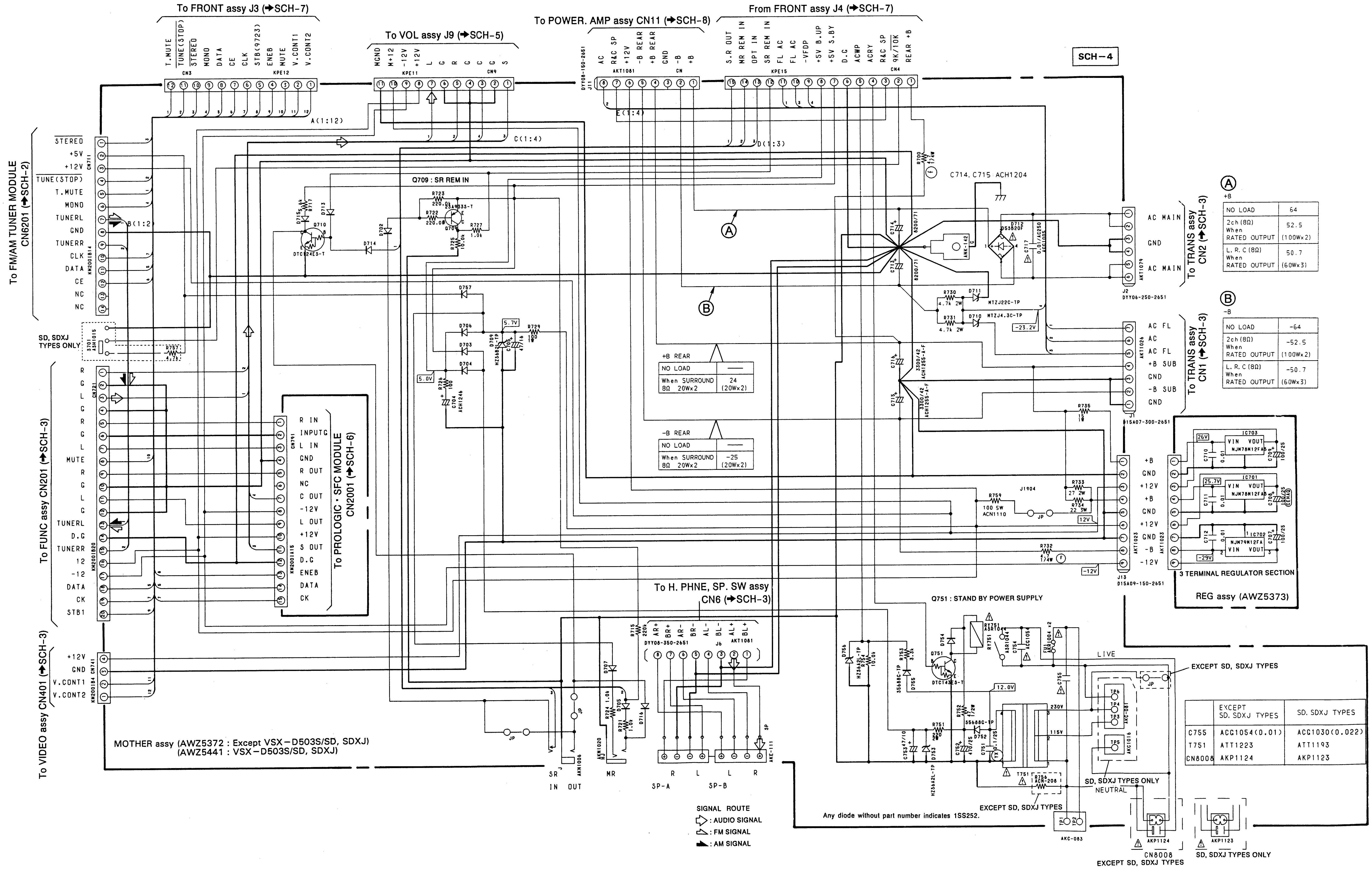
From FRONT assy J4

To TRANS assy CN2

To POWER. AMP assy CN11

To TRANS assy CN1

- This diagram is viewed from the mounted parts side.


To FRONT assy J3 (➔SCH-7)
T.MUTE
TUNE(STOP)
STEREO
MONO
DATA
CE
CLK
STB(9723)
ENEB
MUTE
V.CONT1
V.CONT2
CN3
KPE12
To VOL assy J9 (➔SCH-5)
MGND
M+12
-12V
+12V
L
G
R
G
G
G
S
KPE11
CN9
To POWER. AMP assy CN11 (➔SCH-8)
AC
R&C SP
+12V
-B REAR
+B REAR
GND
-B
+B
AKT1081
CN
From FRONT assy J4 (➔SCH-7)
S.R OUT
MR REM IN
OPT IN
SR REM IN
FL AC
FL AC
-VFDP
+5V B.UP
+5V S.BY
D.G
ACWP
ACRY
R&C SP
9K/10K
REAR +B
KPE15
CN4
SCH-4
A(1:12)
C(1:4)
D(1:3)
E(1:4)
B(1:2)
To FM/AM TUNER MODULE CN6201 (➔SCH-2)
STEREO
+5V
+12V
TUNE(STOP)
T.MUTE
MONO
TUNERL
GND
TUNERR
CLK
DATA
CE
NC
NC
CN711
KM200I814
SD, SDXJ TYPES ONLY
S701
R757
Q709 : SR REM IN
R723
R722
R727
R725
Q710
D713
D714
D702
D715
R717
DTC124ES-T
D757
D706
D703
D704
D709
HZS6B2-TP
C716
R729
R726
C714
ACH1246
5.7V
5.0V
C714, C715 ACH1204
R700
C715
8200/71
ANK-142
D712
D5SB20F
C717
R730
D711
MTZJ22C-TP
R731
D710
MTZJ4.3C-TP
-23.2V
C718
C719
3300/42
ACH1255-A-F
Ⓐ
Ⓑ
+B REAR
-B REAR
To FUNC assy CN201 (➔SCH-3)
R
G
L
G
R
G
L
MUTE
R
G
L
G
TUNERL
D.G
TUNERR
12
-12
DATA
CK
STB1
CN721
KM200I820
To PROLOGIC · SFC MODULE CN2001 (➔SCH-6)
R IN
INPUTG
L IN
GND
R OUT
NC
C OUT
-12V
L OUT
+12V
S OUT
D.G
ENEB
DATA
CK
CN791
KM200IA15
To VIDEO assy CN401 (➔SCH-3)
+12V
GND
V.CONT1
V.CONT2
CN741
KM200I84
To TRANS assy CN2 (➔SCH-3)
AC MAIN
GND
AC MAIN
AKT1079
J2
DYY06-250-2651
To TRANS assy CN1 (➔SCH-3)
AC FL
AC
AC FL
+B SUB
GND
-B SUB
GND
AKT1026
J1
B15A07-300-2651
R735
+B
GND
+12V
+B
GND
+12V
GND
-B
-12V
AKT1023
J13
D15A09-150-2651
R759
100 5W
ACN1110
J1904
JP
R733
27 2W
R734
22 2W
12V
R732
1/4W
-12V
IC703
NJM78M12FA
IC701
NJM78M12FA
IC702
NJM79M12FA
VIN VOUT
26V
25.7V
-29V
C710
C711
C712
C706
C707
C708
3 TERMINAL REGULATOR SECTION
REG assy (AWZ5373)
To H. PHNE, SP. SW assy CN6 (➔SCH-3)
AR+
BR+
AR-
BR-
AL-
BL-
AL+
BL+
AKT1081
DYY08-350-2651
J6
R715
D707
R724
D705
R721
D716
AKN1006
AKM1020
SR
IN
OUT
MR
SP-A
SP-B
R
L
L
R
AKE-111
MOTHER assy (AWZ5372 : Except VSX-D503S/SD, SDXJ)
(AWZ5441 : VSX-D503S/SD, SDXJ)
Q751 : STAND BY POWER SUPPLY
RY751
ASR1044
D754
D756
HZS6A2L-TP
R754
R753
D755
Q751
DTC143ES-T
12.0V
R751
R752
D752
C752
C751
D753
C753
T751
R756
ACN-206
C754
C755
FU1
LIVE
NEUTRAL
230V
115V
TP1
TP2
TP3
TP4
TP5
TP6
AKC-081
AKC1016
AKC-083
EXCEPT SD, SDXJ TYPES
SD, SDXJ TYPES ONLY
AKP1124
AKP1123
CN8008
SIGNAL ROUTE
⇨ : AUDIO SIGNAL
▷ : FM SIGNAL
◣ : AM SIGNAL
Any diode without part number indicates 1SS252.

+B REAR	
NO LOAD	—
When SURROUND 8Ω 20W×2	24 (20W×2)

-B REAR	
NO LOAD	—
When SURROUND 8Ω 20W×2	-25 (20W×2)

Ⓐ +B

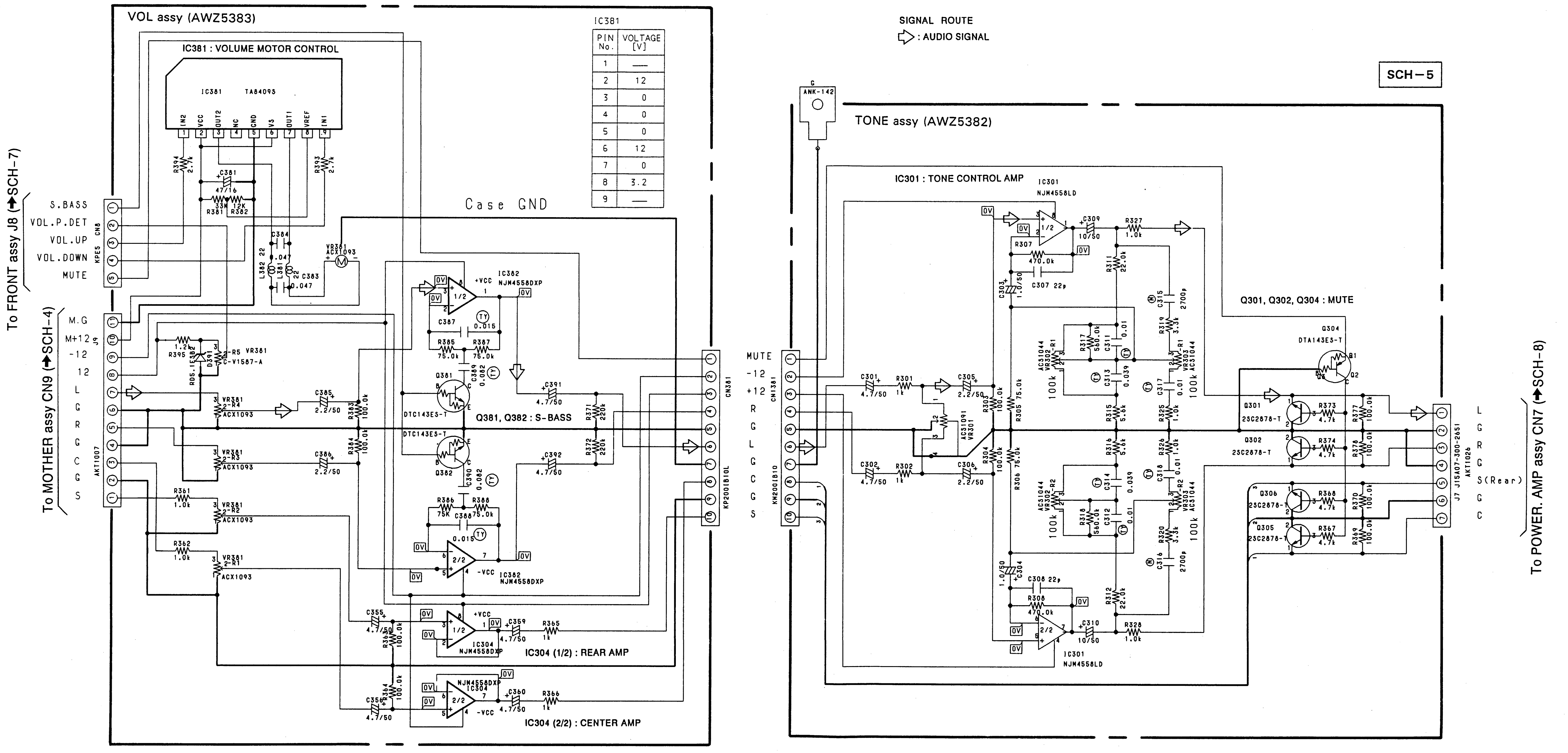
NO LOAD	64
2ch (8Ω) When RATED OUTPUT	52.5 (100W×2)
L. R. C (8Ω) When RATED OUTPUT	50.7 (60W×3)

Ⓑ -B

NO LOAD	-64
2ch (8Ω) When RATED OUTPUT	-52.5 (100W×2)
L. R. C (8Ω) When RATED OUTPUT	-50.7 (60W×3)

	EXCEPT SD, SDXJ TYPES	SD, SDXJ TYPES
C755	ACG1054(0.01)	ACG1030(0.022)
T751	ATT1223	ATT1193
CN8008	AKP1124	AKP1123

3.5 VOL ASSY AND TONE ASSY


VOL assy (AWZ5383)
IC381 : VOLUME MOTOR CONTROL
IC381 TA8409S
IN2 VCC OUT2 NC GND V3 OUT1 VREF IN1
Case GND
To FRONT assy J8 (➡SCH-7)
S.BASS
VOL.P.DET
VOL.UP
VOL.DOWN
MUTE
KPES CN8
To MOTHER assy CN9 (➡SCH-4)
M.G
M+12
-12
12
L
G
R
G
C
G
S
AKT1007
IC382 NJM4558DXP
Q381, Q382 : S-BASS
DTC143ES-T
IC304 (1/2) : REAR AMP
IC304 (2/2) : CENTER AMP
CN381
KP200181OL
SIGNAL ROUTE
: AUDIO SIGNAL
SCH-5
ANK-142
TONE assy (AWZ5382)
IC301 : TONE CONTROL AMP
IC301 NJM4558LD
MUTE
-12
+12
R
G
L
G
C
G
S
CN1381
KM200181O
Q301, Q302, Q304 : MUTE
Q304 DTA143ES-T
Q301 2SC2878-T
Q302 2SC2878-T
Q306 2SC2878-T
Q305 2SC2878-T
J7 J15A07-300-2651 AKT1026
L
G
R
G
S(Rear)
G
C
To POWER. AMP assy CN7 (➡SCH-8)

IC381

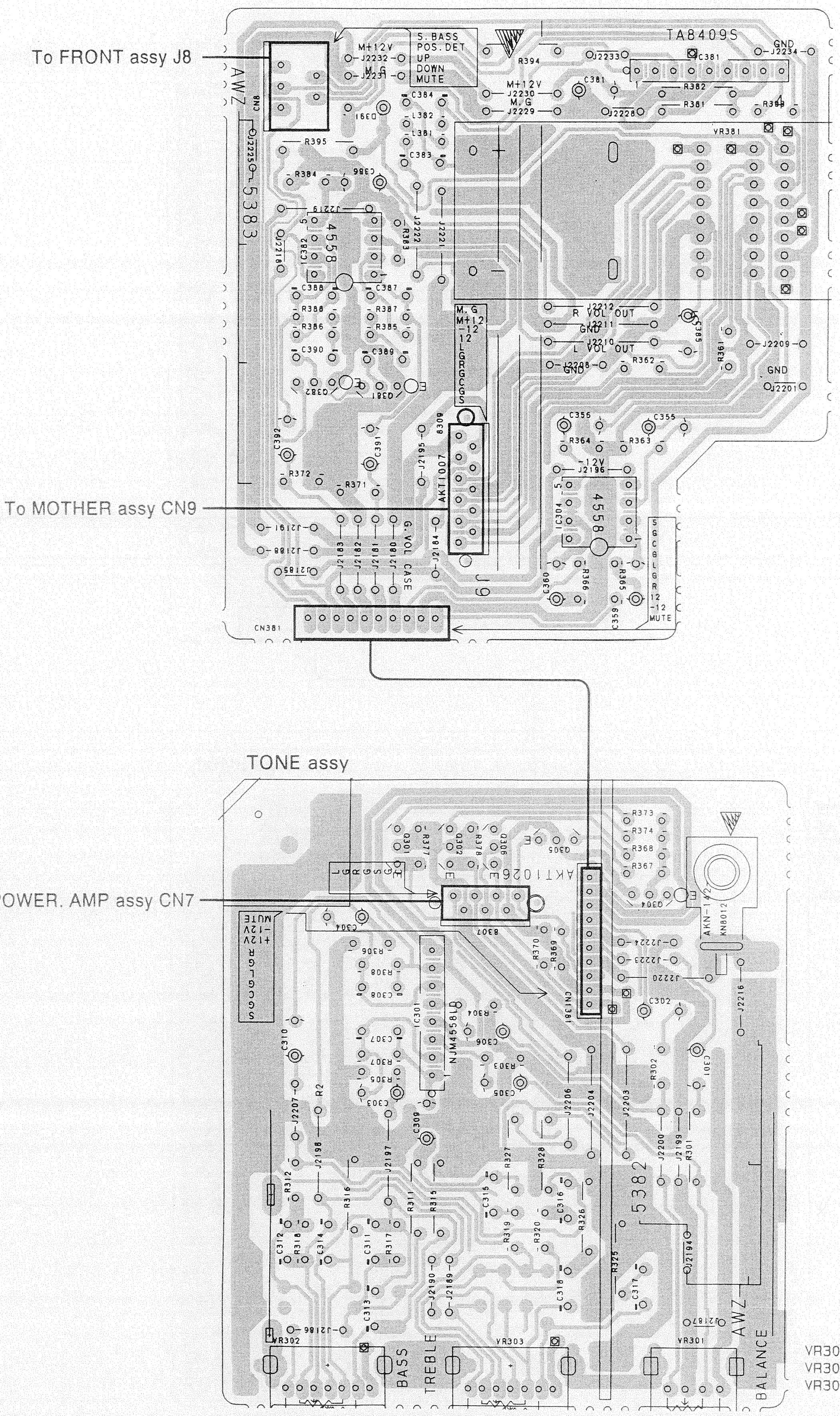
PIN No.	VOLTAGE [V]
1	—
2	12
3	0
4	0
5	0
6	12
7	0
8	3.2
9	—

1 2

- This diagram is viewed from the mounted parts side.

A

VOL assy


To FRONT assy J8
To MOTHER assy CN9
TONE assy
To POWER. AMP assy CN7
M+12V
J2232
M.G
J2231
S.BASS
POS.DET
UP
DOWN
MUTE
TA8409S
GND
J2234
J2233
IC381
R394
M+12V
J2230
M.G
J2229
C381
R382
R381
R393
J2228
VR381
AWZ
CN3
D391
C384
L382
L381
C383
C386
J2225
5383
R395
R384
J2219
IC382
4558
J2218
R383
J2222
J2221
C388
C387
R388
R387
R386
R385
C390
C389
C382
D381
C392
C391
R372
R371
J2195
AKT1007
8309
M.G
M+12
-12
12
L
G
R
G
G
S
J9
R VOL OUT
GND
L VOL OUT
J2212
J2211
J2210
J2208
R362
C385
R361
J2209
GND
J2201
C355
C355
R364
R363
-12V
J2196
IC304
4558
J2191
J2188
J2185
J2183
J2182
J2181
J2180
G.VOL
CASE
J2184
C360
R366
R365
C359
S
G
C
G
L
G
R
12
-12
MUTE
CN381
Q301
Q302
Q306
Q305
E
R377
R378
R373
R374
R368
R367
L
G
R
G
S
E
AKT1026E
Q304
AKN-1/2
KN8012
MUTE
-12V
+12V
R
G
L
G
S
C304
8307
R306
R308
C308
R370
R369
CN1301
J2224
J2223
J2220
J2216
C302
R304
C306
IC301
NJM4558D
C310
C307
R307
R305
R303
C303
C305
C301
R302
J2207
R2
J2198
J2197
C309
J2206
J2204
J2203
J2200
J2199
R301
R327
R328
R312
R316
R311
R315
C315
C316
R326
5382
C312
R318
C314
C311
R317
R319
R320
R325
J2194
C317
J2190
J2189
C313
C318
J2186
J2187
AWZ
VR302
BASS
TREBLE
VR303
VR301
BALANCE

B

C

D

IC381 A

VR381

IC382

Q381
Q382

B

IC304

Q301
Q302
Q306
Q305

C

Q304

IC301

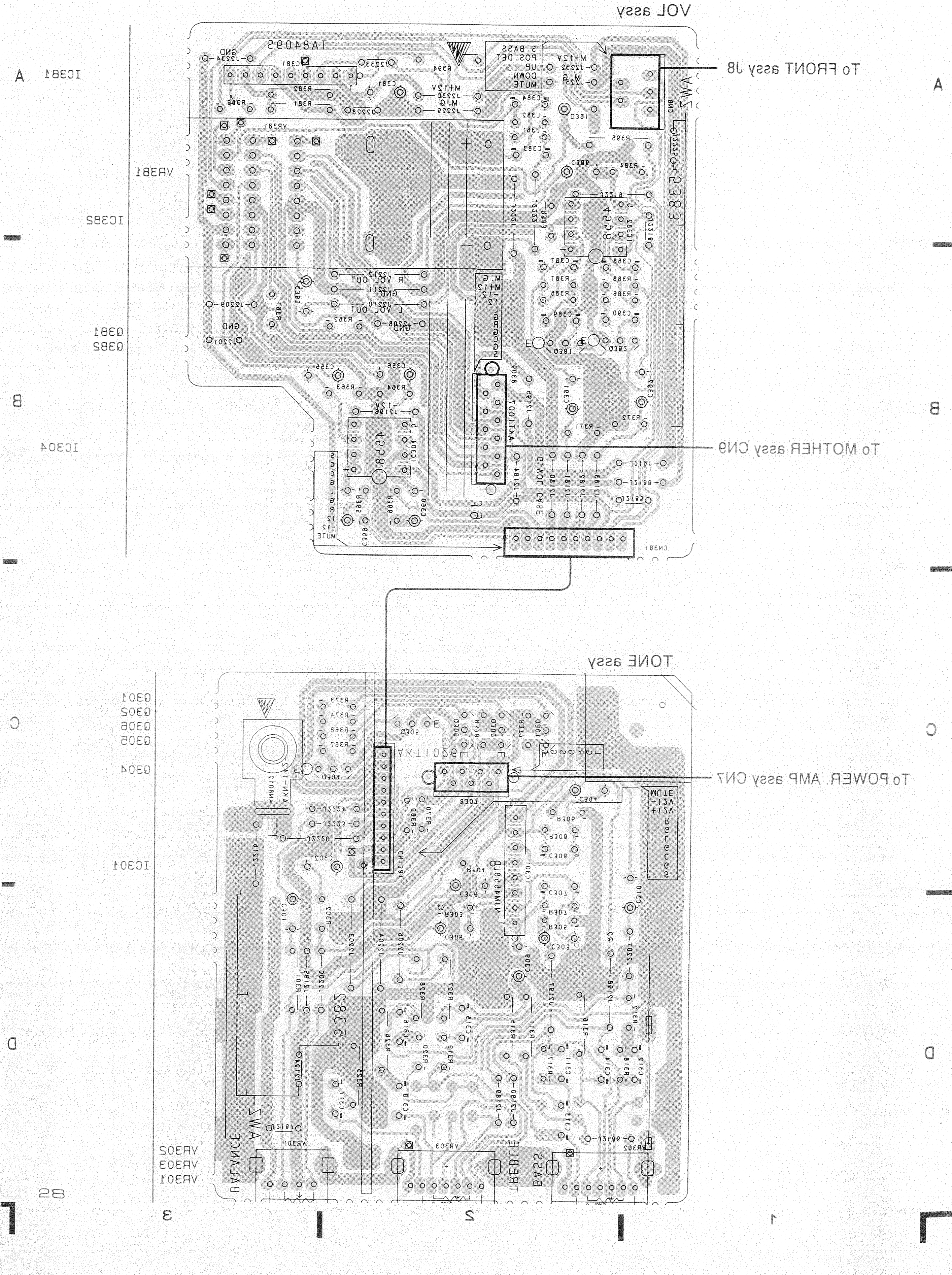
D

VR302
VR303
VR301

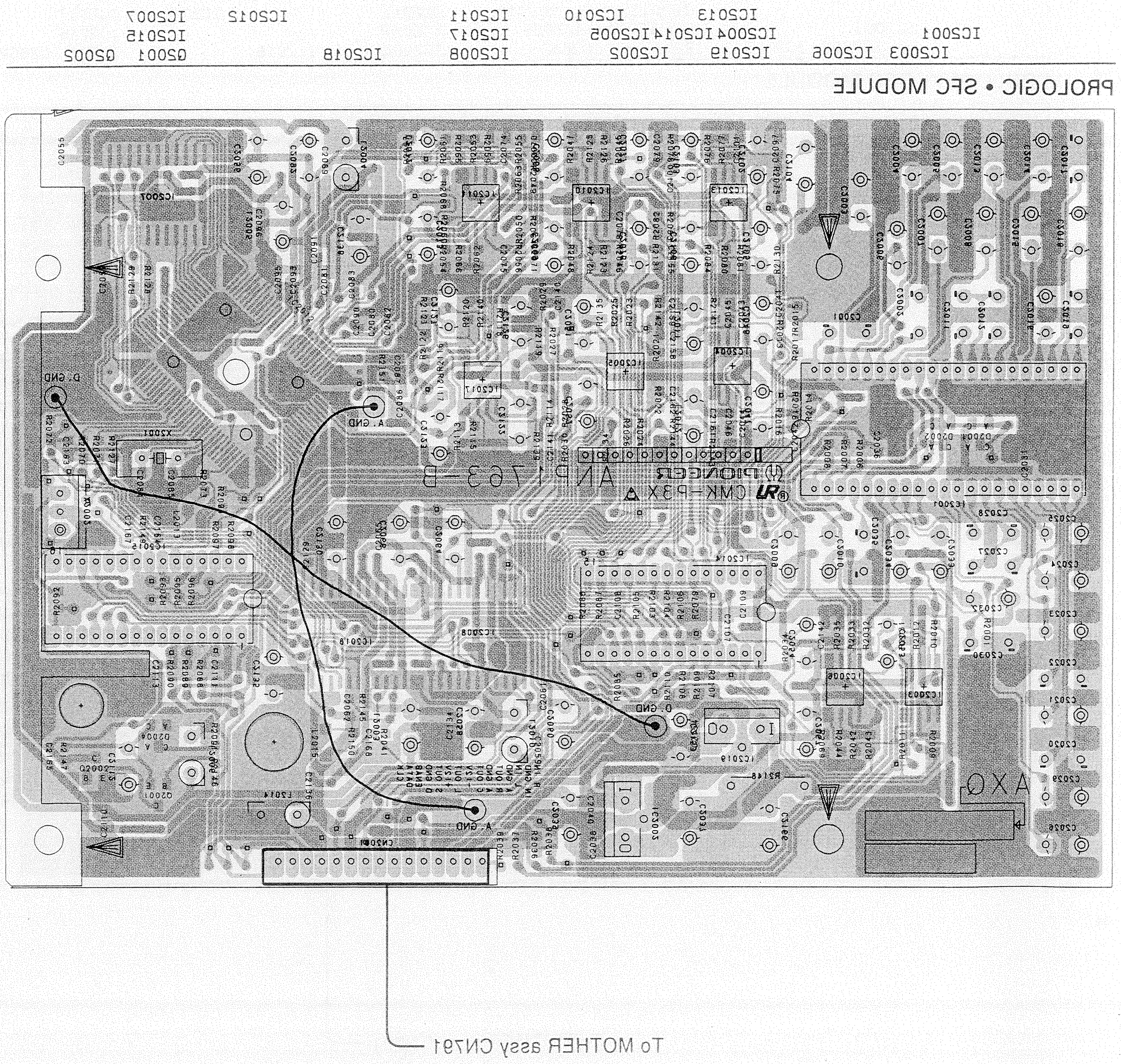
1 2 3

PCB-4

- This diagram is viewed from the foil side.

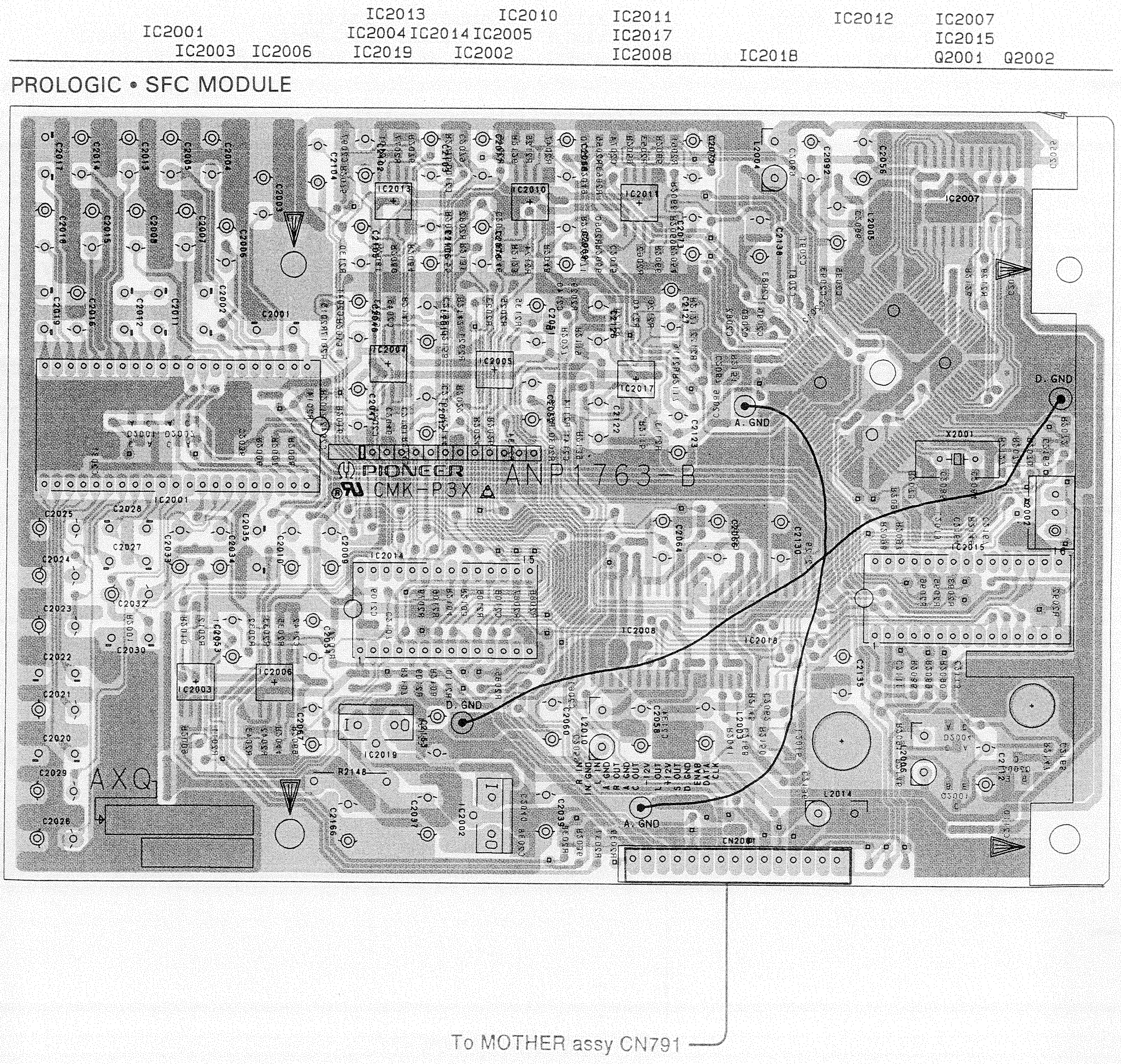

VOL assy
To FRONT assy J8
To MOTHER assy CN9
TONE assy
To POWER. AMP assy CN7
IC381
VR381
IC382
Q381
Q382
IC304
Q301
Q302
Q303
Q305
Q304
IC301
VR302
VR303
VR301
BALANCE
TREBLE
BASS
A
B
C
D
1
2
3

3.6 PROLOGIC • SFC MODULE

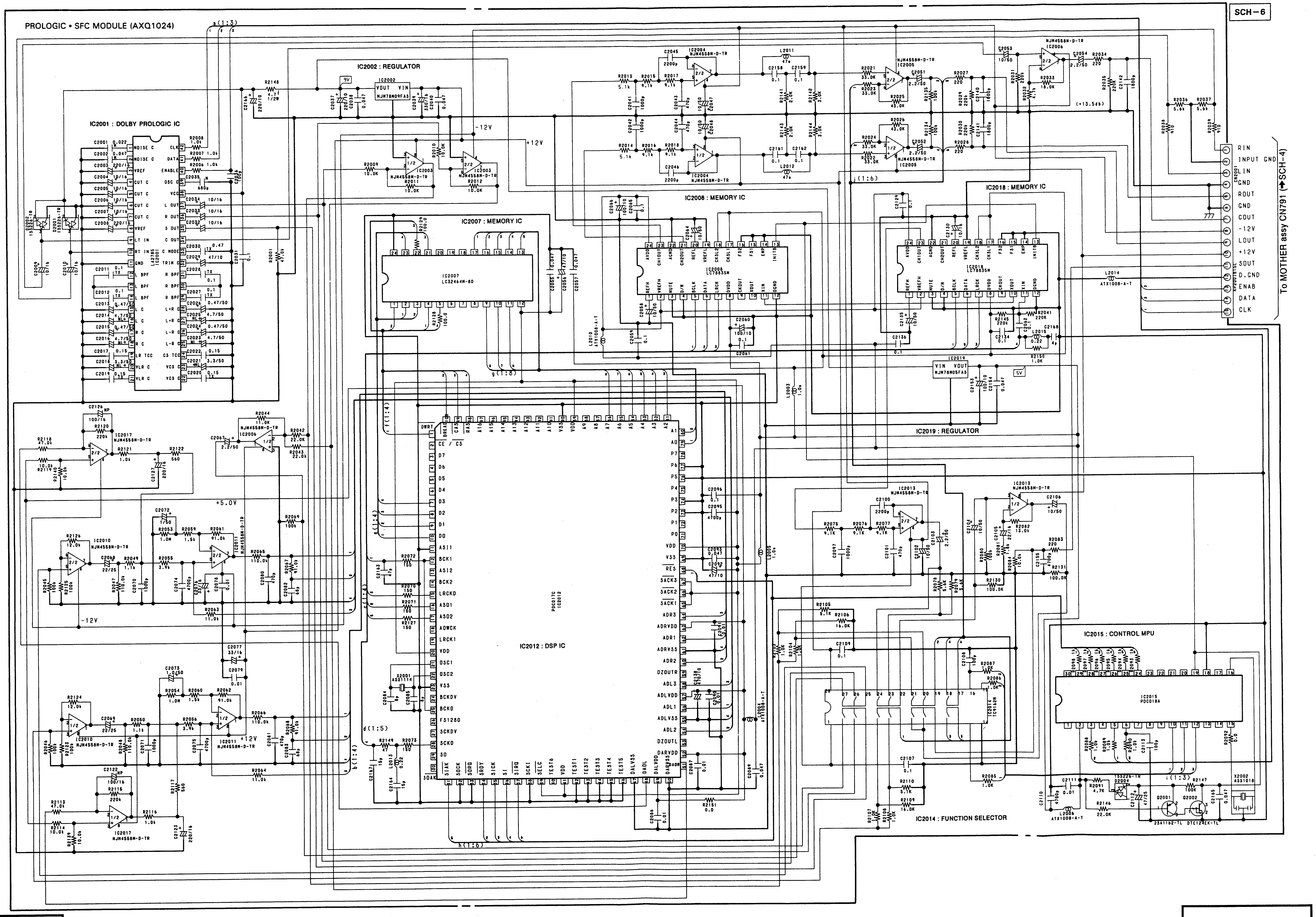

IC2007
IC2015
Q2001 Q2002
IC2012
IC2018
IC2011
IC2017
IC2008
IC2010
IC2004 IC2014 IC2005
IC2002
IC2013
IC2019
IC2001
IC2003 IC2006
PROLOGIC • SFC MODULE
D.GND
A.GND
GND
ANP1763-B
PIONEER
CMK-P3X
CN2001
To MOTHER assy CN791

- This diagram is viewed from the gray colored foil side.
- This PCB is double side.

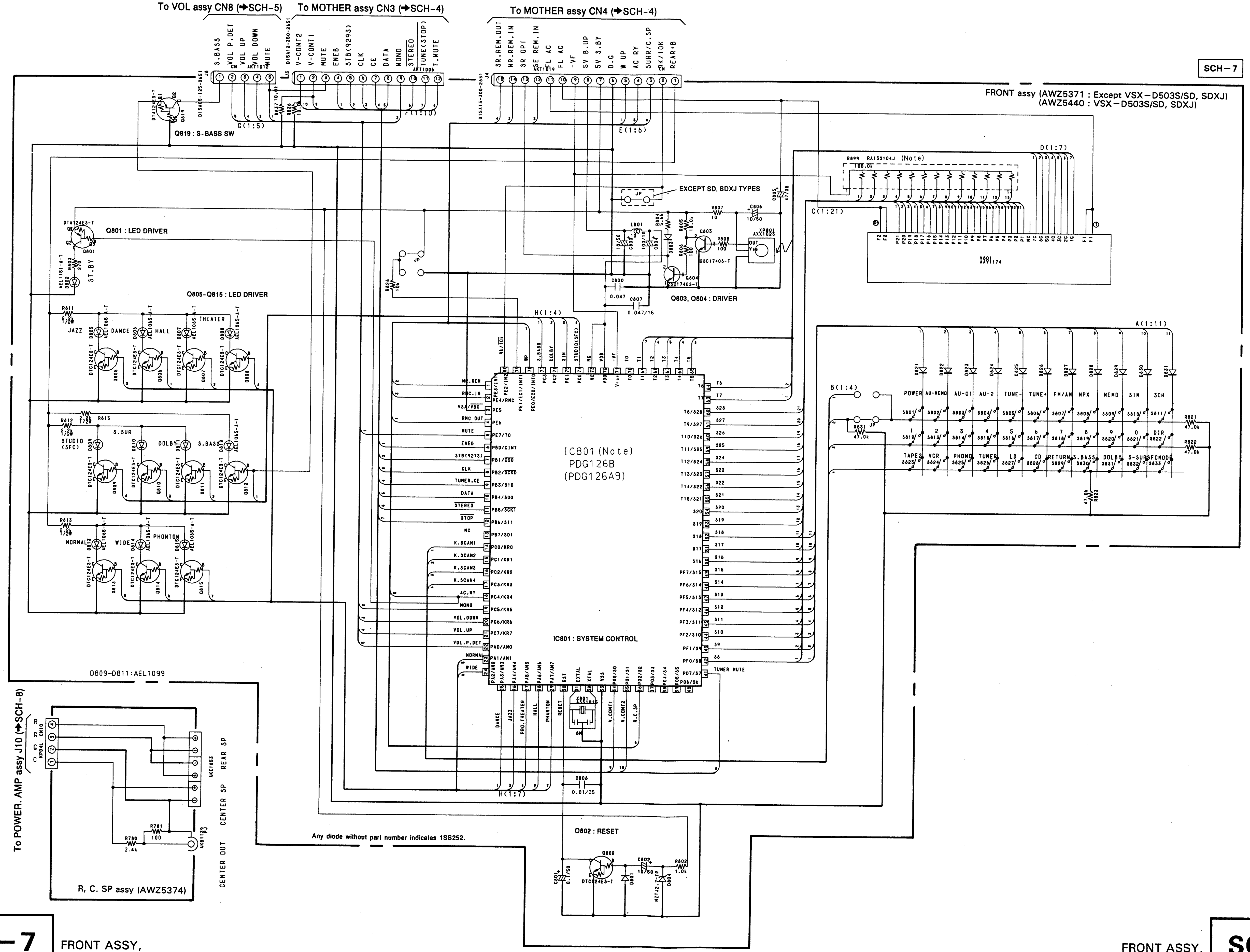
3.6 PROLOGIC • SFC MODULE


IC2001
IC2003
IC2006
IC2013
IC2004
IC2014
IC2019
IC2010
IC2005
IC2002
IC2011
IC2017
IC2008
IC2018
IC2012
IC2007
IC2015
Q2001
Q2002
PROLOGIC • SFC MODULE
PIONEER
CMK-P3X
ANP1763-B
AXQ
A. GND
D. GND
X2001
CN2001
R2148
To MOTHER assy CN791

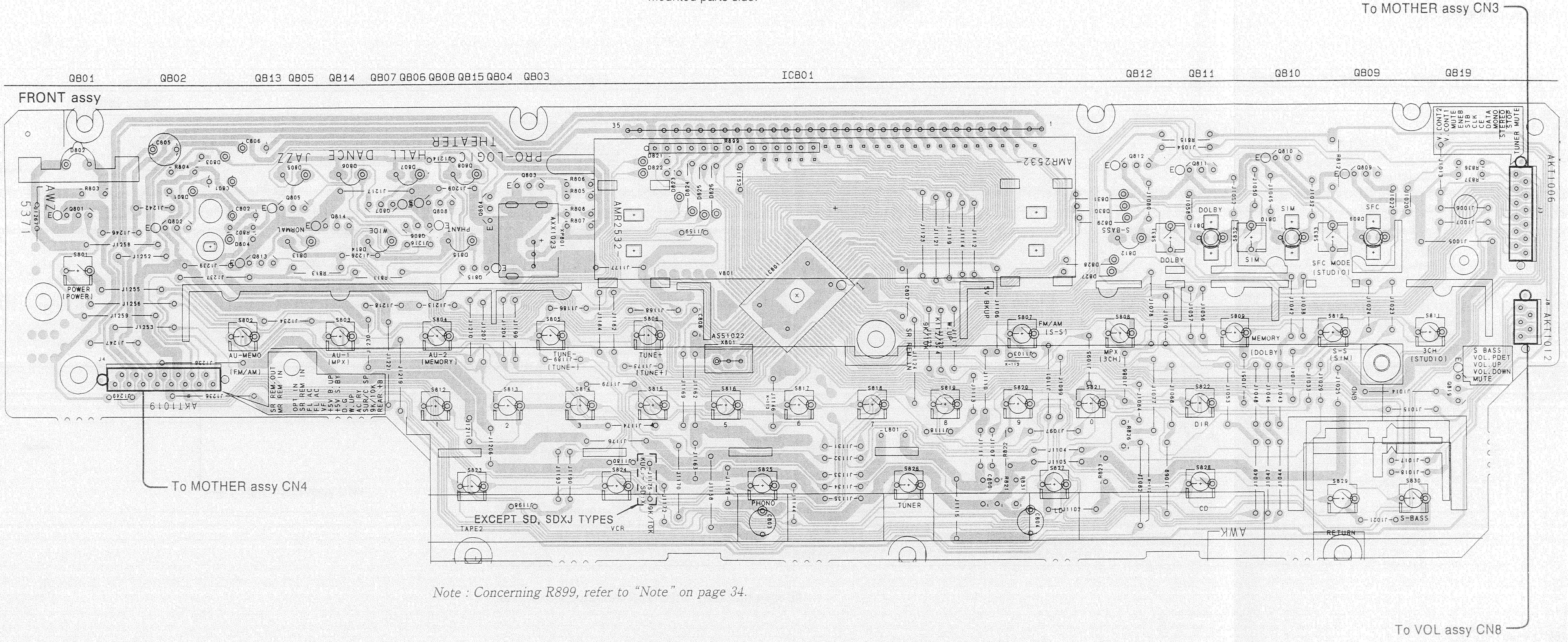
- This diagram is viewed from the pink colored foil side.
- This PCB is double sided.


SCH-6
PROLOGIC • SFC MODULE (AXQ1024)
IC2001 : DOLBY PROLOGIC IC
IC2002 : REGULATOR
NJM78M09FA3
IC2003
NJM4558M-D-TR
IC2004
IC2005
IC2006
IC2007 : MEMORY IC
LC324264M-80
IC2008 : MEMORY IC
LC7883SM
IC2010
IC2011
IC2012 : DSP IC
IC2013
IC2014 : FUNCTION SELECTOR
IC2015 : CONTROL MPU
PDC018A
IC2017
IC2018 : MEMORY IC
IC2019 : REGULATOR
NJM78M05FA3
+12V
-12V
+5.0V
9V
5V
(+13.5dB)
RIN
INPUT GND
LIN
GND
ROUT
GND
COUT
-12V
LOUT
+12V
SOUT
D.GND
ENAB
DATA
CLK
To MOTHER assy CN791 (SCH-4)
Q2001
Q2002
2SA1162-TL
DTC124EK-TL
X2001
X2002
h(1:6)
g(1:8)
i(1:6)
i(1:3)
d(1:5)
b(1:4)
f(1:4)

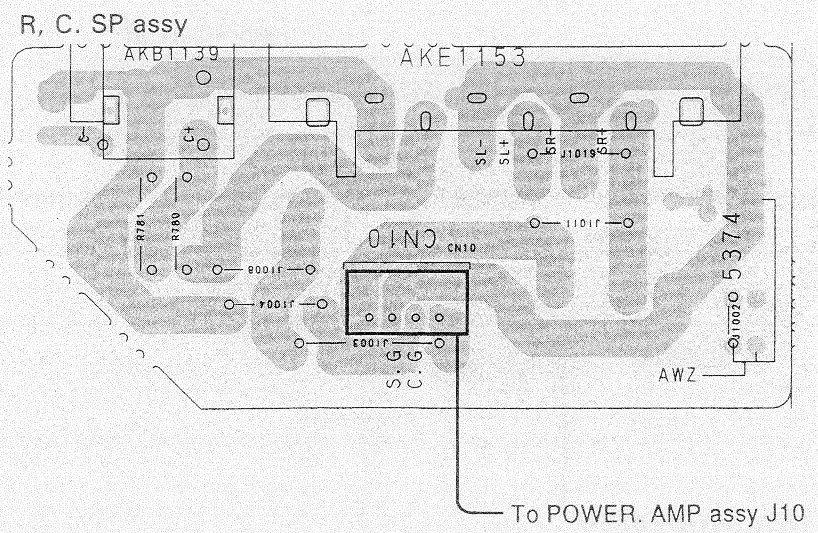
3.7 FRONT ASSY AND R, C. SP ASSY


To VOL assy CN8 (➔SCH-5)
To MOTHER assy CN3 (➔SCH-4)
To MOTHER assy CN4 (➔SCH-4)
SCH-7
FRONT assy (AWZ5371 : Except VSX-D503S/SD, SDXJ)
(AWZ5440 : VSX-D503S/SD, SDXJ)
S.BASS
VOL P.DET
VOL UP
VOL DOWN
MUTE
V-CONT1
MUTE
ENEB
STB(9293)
CLK
CE
DATA
MONO
STEREO
TUNE(STOP)
T.MUTE
SR.REM.OUT
MR.REM.IN
SR OPT
SE REM.IN
FL AC
FL AC
-VF
5V B.UP
5V S.BY
D.G
W UP
AC RY
SURR/C.SP
2K/10K
REAR+B
Q819 : S-BASS SW
Q801 : LED DRIVER
ST.BY
Q805-Q815 : LED DRIVER
JAZZ
DANCE
HALL
THEATER
STUDIO (SFC)
5.SUR
DOLBY
S.BASS
NORMAL
WIDE
PHANTOM
EXCEPT SD, SDXJ TYPES
Q803, Q804 : DRIVER
V801 AAV1174
R899 RA133104J (Note)
IC801 (Note)
PDG126B
(PDG126A9)
IC801 : SYSTEM CONTROL
TUNER MUTE
D809-D811 : AEL1099
Q802 : RESET
Any diode without part number indicates 1SS252.
POWER
AU-MEMO
AU-01
AU-2
TUNE-
TUNE+
FM/AM
MPX
MEMO
SIM
3CH
DIR
TAPE2
VCR
PHONO
TUNER
LD
CD
RETURN
S.BASS
DOLBY
S-SUR
SFCMODE
To POWER. AMP assy J10 (➔SCH-8)
R, C. SP assy (AWZ5374)
REAR SP
CENTER SP
CENTER OUT

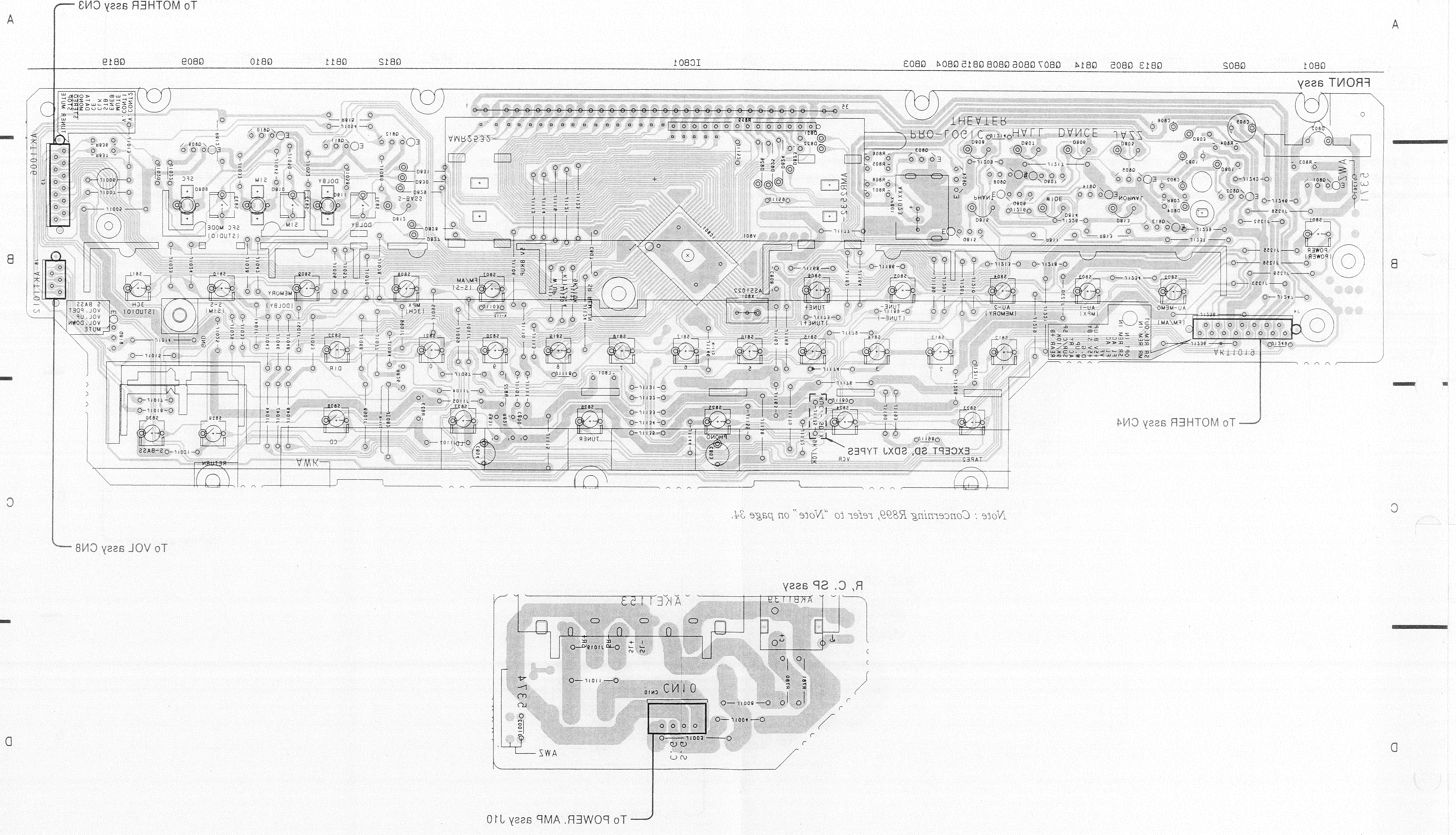
- This diagram is viewed from the mounted parts side.


To MOTHER assy CN3
Q801
Q802
Q813
Q805
Q814
Q807
Q806
Q808
Q815
Q804
Q803
IC801
Q812
Q811
Q810
Q809
Q819
FRONT assy
AMR2532
AXX1023
AKT1006
AKT1012
AKT1019
AWZ
5371
POWER
AU-MEMO
AU-1 (MPX)
AU-2 (MEMORY)
TUNE− (TUNE−)
TUNE+ (TUNE+)
FM/AM (S-S)
MPX (3CH)
MEMORY (DOLBY)
S-S (SIM)
3CH (STUDIO)
DOLBY
SIM
SFC MODE (STUDIO)
S-BASS
DIR
CD
TUNER
PHONO
TAPE2
VCR
RETURN
AWK
EXCEPT SD, SDXJ TYPES
To MOTHER assy CN4
To VOL assy CN8

Note : Concerning R899, refer to "Note" on page 34.


R, C. SP assy
AKB1139
AKE1153
CN10
5374
AWZ
To POWER. AMP assy J10

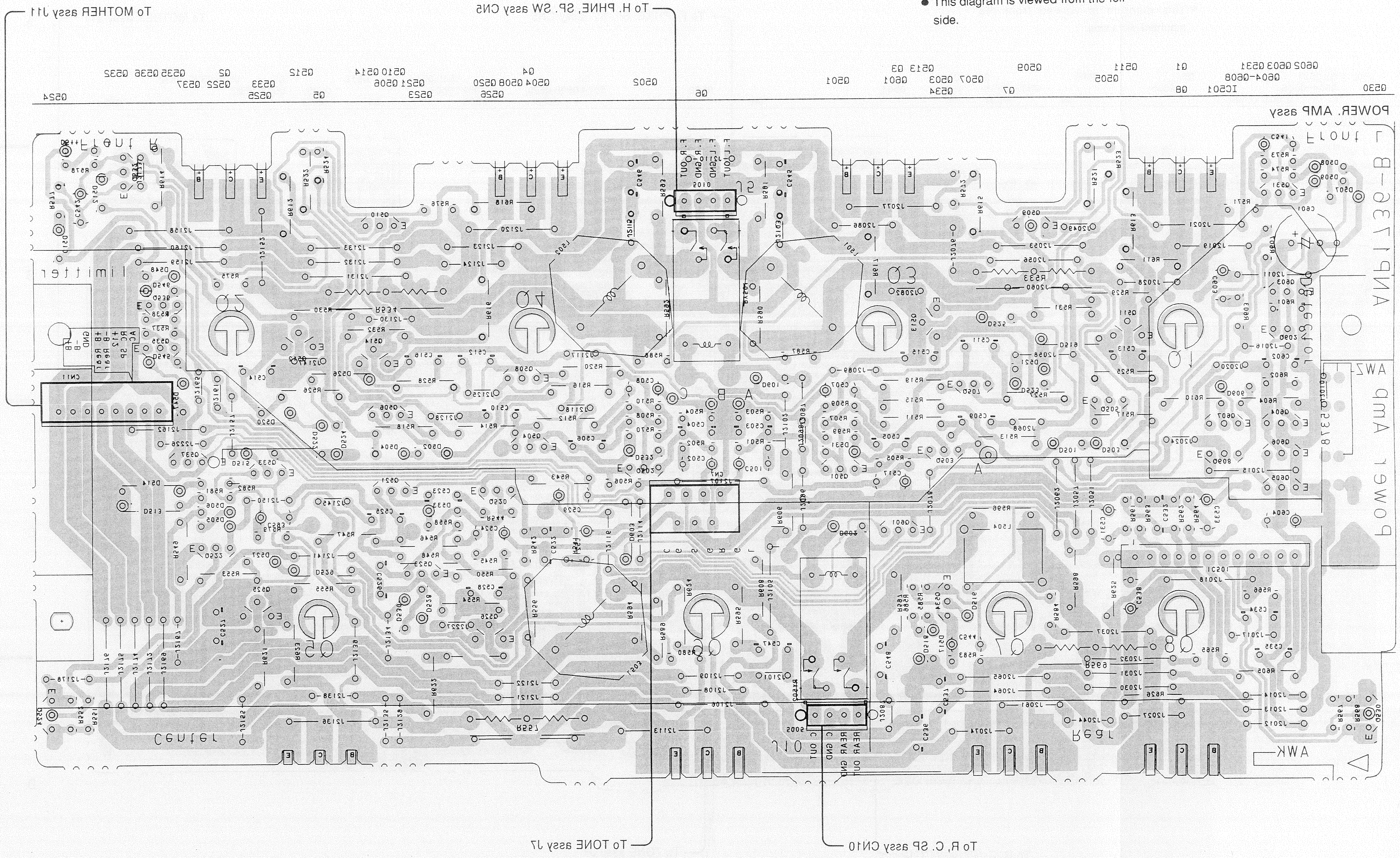
- This diagram is viewed from the foil side.


To MOTHER assy CN3
FRONT assy
IC801
Q801
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
Q812
Q813
Q814
Q815
Q819
THEATER
PRO-LOGIC
HALL
DANCE
JAZZ
SFC MODE
MEMORY
DOLBY
S-BASS
POWER
TUNE+
TUNE-
AU-2
AU-1
AU-MEMO
FM/AM
TUNER
PHONO
CD
VCR
TAPE2
AKT1006
AKT1012
AKT1019
EXCEPT SD, SDXJ TYPES
To MOTHER assy CN4
To VOL assy CN8
R. C. SP assy
AKE1153
AKB1139
CN10
To POWER. AMP assy J10

Note : Concerning R899, refer to "Note" on page 34.

3.8 POWER. AMP ASSY

- This diagram is viewed from the foil side.

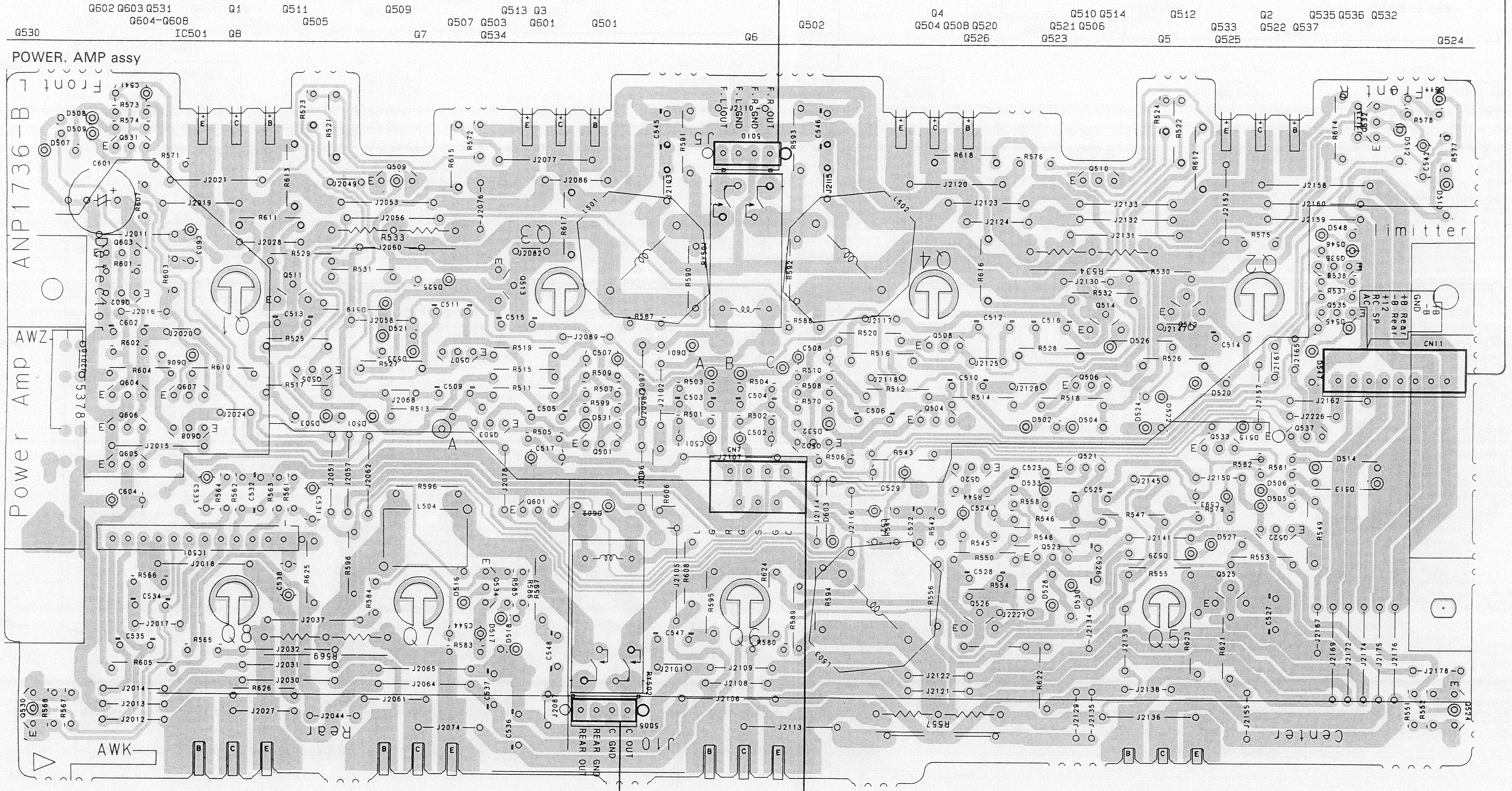

To MOTHER assy J11
To H. PHNE, SP. SW assy CN5
POWER. AMP assy
limitter
Center
Rear
Front
To TONE assy J7
To R, C. SP assy CN10

3.8 POWER. AMP ASSY

• This diagram is viewed from the mounted parts side.

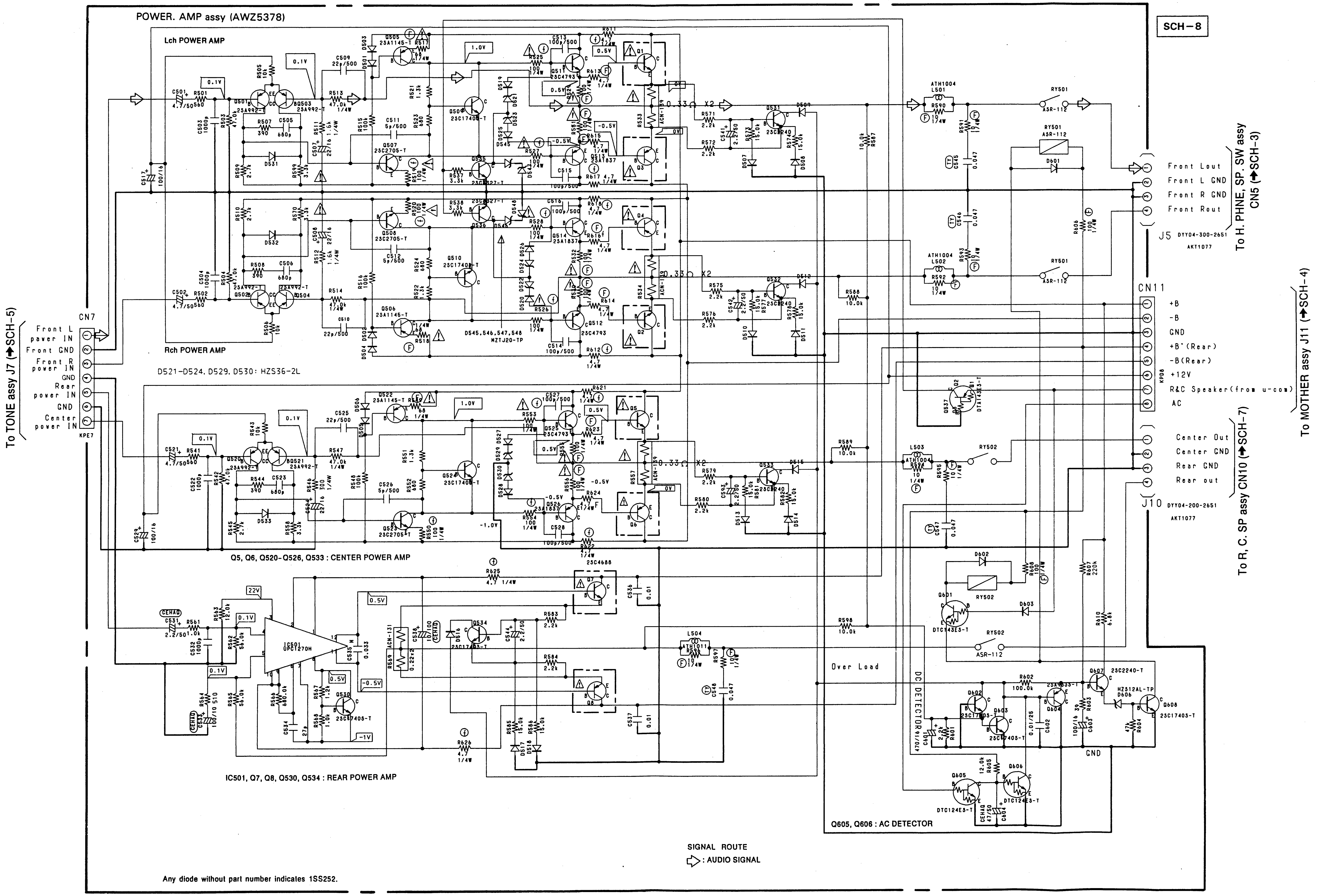
To H. PHNE, SP. SW assy CN5

To MOTHER assy J11


Q602 Q603 Q531
Q604–Q608
Q530
Q1
IC501
Q8
Q511
Q505
Q509
Q7
Q507 Q503
Q534
Q513 Q3
Q601
Q501
Q6
Q502
Q4
Q504 Q508 Q520
Q526
Q510 Q514
Q521 Q506
Q523
Q512
Q5
Q533
Q525
Q2
Q522 Q537
Q535 Q536 Q532
Q524
POWER. AMP assy
ANP1736-B
Front
Power Amp
Detector
AWZ
AWK
Rear
J10
REAR OUT
REAR GND
C GND
C OUT
CN7
J5
F.L OUT
F.L GND
F.R GND
F.R OUT
CN11
limitter
Front R
Center
A B C D

To R, C. SP assy CN10

To TONE assy J7


SCH-8
POWER. AMP assy (AWZ5378)
Lch POWER AMP
Rch POWER AMP
D521-D524, D529, D530: HZS36-2L
D545,546,547,548 MZTJ20-TP
Q5, Q6, Q520-Q526, Q533 : CENTER POWER AMP
IC501, Q7, Q8, Q530, Q534 : REAR POWER AMP
Q605, Q606 : AC DETECTOR
Over Load
DC DETECTOR
To TONE assy J7 (→SCH-5)
Front L power IN
Front GND
Front R power IN
GND
Rear power IN
GND
Center power IN
CN7
KPE7
To H. PHONE, SP. SW assy CN5 (→SCH-3)
Front Lout
Front L GND
Front R GND
Front Rout
J5 DYY04-300-2651 AKT1077
CN11
+B
-B
GND
+B'(Rear)
-B(Rear)
+12V
R&C Speaker(from u-com)
AC
KPD8
To MOTHER assy J11 (→SCH-4)
To R, C. SP assy CN10 (→SCH-7)
Center Out
Center GND
Rear GND
Rear out
J10 DYY04-200-2651 AKT1077
RY501 ASR-112
RY502 ASR-112
ATH1004 L501
ATH1004 L502
L503
L504 ATH1011
ACN-139
ACN-131
IC501 UPC1270H
0.1V
0.5V
1.0V
-0.5V
-1.0V
22V
0V
-1V
GND
SIGNAL ROUTE
: AUDIO SIGNAL
Any diode without part number indicates 1SS252.

4. PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 .... RD1/8PM 5 6 1 J
47kΩ → 47 × 10^3 → 473 .... RD1/4PS 4 7 3 J
0.5Ω → 0R5 .... RN2H 0 R 5 K
1Ω → 010 .... RS1P 0 1 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10^1 → 5621 .... RM1/4PC 5 6 2 1 F

LIST OF ASSEMBLIES

Mark	No.	Description	Parts No.
NSP		MAIN ASSY (Except VSX-D503S/SD)	AWK1779
NSP		MAIN ASSY (For VSX-D503S/SD)	AWK1806
		— FRONT ASSY (Except VSX-D503S/SD)	AWZ5371
		— FRONT ASSY (For VSX-D503S/SD)	AWZ5440
		— MOTHER ASSY (Except VSX-D503S/SD)	AWZ5372
		— MOTHER ASSY (For VSX-D503S/SD)	AWZ5441
		— REG. ASSY	AWZ5373
		— R, C. SP ASSY	AWZ5374
NSP		AMP/FUNC ASSY (For VSX-D503S/KU)	AWK1780
NSP		AMP/FUNC ASSY (Except VSX-D503S/KU)	AWK1864
		— POWER. AMP ASSY	AWZ5378
		— FUNC ASSY	AWZ5379
		— TRANS ASSY (For VSX-D503S/KU)	AWZ5720
		— TRANS ASSY (Except VSX-D503S/KU)	AWZ5380
		— VIDEO ASSY	AWZ5381
		— TONE ASSY	AWZ5382
		— VOL ASSY	AWZ5383
		— H. PHNE, SP. SW ASSY	AWZ5384
		FM/AM TUNER MODULE	AXQ1012
		PROLOGIC • SFC MODULE	AXQ1024

For AWZ5371 and AWZ5440:
Although AWZ5371 and AWZ5440 are different in part number, they consist of the same service parts.

FRONT ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC801	CONTROL MCU	PDG126B (PDG126A9) Note
	Q801	TRANSISTOR	DTA124ES
	Q802	TRANSISTOR	DTC124ES
	Q803, 804	TRANSISTOR	2SC1740S
	Q805-815	TRANSISTOR	DTC124ES
	Q819	TRANSISTOR	DTA124ES
	D801	DIODE	1SS252
	D802	LED (RED)	AEL1151
	D803	DIODE	1SS252
	D804	ZENER DIODE	MTZJ2.7
	D805-808	LED (RED)	AEL1065
	D809-811	LED (RED)	AEL1099
	D812-815	LED (RED)	AEL1065
	D821-831	DIODE	1SS252

SWITCHES

Mark	No.	Description	Parts No.
	S801-833	SWITCH	ASG1029

COIL

Mark	No.	Description	Parts No.
	L801	AXIAL INDUCTOR	LAU100K

CAPACITORS

Mark	No.	Description	Parts No.
	C800	CERAMIC CAPACITOR	CKPUYF473Z16
	C801	ELECT. CAPACITOR	CEAS0R1M50
	C802, 803	ELECT. CAPACITOR	CEAS100M50
	C804	ELECT. CAPACITOR	CEAS101M10
	C805	ELECT. CAPACITOR	CEAS470M35
	C806	ELECT. CAPACITOR	CEAS100M50
	C807	CERAMIC CAPACITOR	CKPUYF473Z16
	C808	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

Mark	No.	Description	Parts No.
	R811, 812	CARBON FILM RESISTOR	RD1/2PM222J
	R813, 815	CARBON FILM RESISTOR	RD1/2PM222J
	(R899	RESISTOR ARRAY	RA13S104J) Note
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		REMOTE RECEIVER UNIT	AXX1023
		LED HOLDER (PLS)	AMR2632
	V801	FL TUBE	AAV1174
	X801	CRYSTAL RESONATOR	ASS1015

Note: Concerning IC801 and R899, refer to page 34.

MOTHER ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	Q709	TRANSISTOR	2SA933S
	Q710	TRANSISTOR	DTC124ES
	Q751	TRANSISTOR	DTC143ES
	D702-707	DIODE	1SS252
	D709	ZENER DIODE	HZS6B2L
	D710	ZENER DIODE	MTZJ4.3C
	D711	ZENER DIODE	MTZJ22C
⚠	D712	DIODE	D5SB20F
	D713-716	DIODE	1SS252
	D752	DIODE	S5688G
	D753	ZENER DIODE	HZS6A2L
	D754	DIODE	1SS252
	D755	DIODE	S5688G
	D756	ZENER DIODE	HZS6A2L
	D757	DIODE	1SS252

SWITCH

Mark	No.	Description	Parts No.
	S701	SWITCH (VSX-D503S/SD only)	ASH1015

RELAY

Mark	No.	Description	Parts No.
⚠	RY751	RELAY	ASR1044

TRANSFORMER

Mark	No.	Description	Parts No.
⚠	T751	POWER TRANSFORMER (Except VSX-D503S/SD)	ATT1223
⚠	T751	POWER TRANSFORMER (For VSX-D503S/SD)	ATT1193

CAPACITORS

Mark	No.	Description	Parts No.
	C704	CAPACITOR	ACH1246
	C705	ELECT. CAPACITOR	CEAS470M16
	C713, 714	ELECT. CAPACITOR (8200/71)	ACH1204
	C715, 716	CEA (3300/42V)	ACH1255
⚠	C717	CKA (0.01/AC250V)	ACG1005
	C751	CERAMIC CAPACITOR	CKCYX104M25
	C752	ELECT. CAPACITOR	CEAS471M25
	C753	ELECT. CAPACITOR	CEAS470M10
⚠	C754	CKA (0.01/AC400V)	ACG1054
⚠	C755	CKA (0.01/AC400V) (Except VSX-D503S/SD)	ACG1054
⚠	C755	CKA (0.022/AC400V) (For VSX-D503S/SD)	ACG1030

RESISTORS

Mark	No.	Description	Parts No.
	R700	FUSIBLE RESISTOR	RFA1/4PS4R7J
	R729	METAL OXIDE RESISTOR	RS1LMF101J
	R730, 731	METAL OXIDE RESISTOR	RS2LMF472J
	R732	CARBON FILM RESISTOR	RD1/4PMF4R7J
	R733	METAL OXIDE RESISTOR	RS2LMF270J
	R734	METAL OXIDE RESISTOR	RS3LMF220J
	R735	METAL OXIDE RESISTOR	RS1LMF150J
	R751	METAL OXIDE RESISTOR	RS2LMF221J
	R752	CARBON FILM RESISTOR	RD1/2PM470J
⚠	R756	RESISTOR (2.2M, 1/2W) (Except VSX-D503S/SD)	ACN-208
	R757	CARBON FILM RESISTOR (VSX-D503S/SD only)	RD1/8PM472J
	R759	RESISTOR (100, 5W)	ACN1110
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		CABLE HOLDER (6P)	AKT1079
		CABLE HOLDER (8P)	AKT1081
		CABLE HOLDER (8P)	AKT1081
		SPEAKER TERMINAL 8-P	AKE-111
		JACK	AKN1020
	CN3	CONNECTOR (12P)	KPE12
	CN4	CONNECTOR (15P)	KPE15
	CN711	14P PLUG	KM200IB14
	CN721	20P PLUG	KM200IB20
	CN741	4P PLUG	KM200IB4
	CN791	15P PLUG	KM200IB15
	CN8005	JACK	AKN1006
⚠	CN8008	AC INLET (1P) (Except VSX-D503S/SD)	AKP1124
⚠	CN8008	AC INLET (1P) WITH OUTLET (For VSX-D503S/SD)	AKP1124
	CN9	CONNECTOR (11P)	KPE11

REG. ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC701	REGULATOR IC	NJM78M12FAS
	IC702	REGULATOR IC	NJM79M12FA
	IC703	REGULATOR IC	NJM78M12FAS

CAPACITORS

Mark	No.	Description	Parts No.
	C707	ELECT. CAPACITOR	CEAS101M25
	C708	ELECT. CAPACITOR	CEHAQ101M25
	C709	ELECT. CAPACITOR	CEAS101M25
	C710-712	CERAMIC CAPACITOR	CKCYF103Z50

R, C. SP ASSY

RESISTORS

Mark	No.	Description	Parts No.
	R780	CARBON FILM RESISTOR	RD1/8PM242J
	R781	CARBON FILM RESISTOR	RD1/8PM101J

OTHERS

Mark	No.	Description	Parts No.
	CN780	PIN JACK 1-P	AKB1139
	CN781	SPEAKER TERMINAL 6-P	AKE1053

POWER. AMP ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC501	PRE-DRIVER-IC	UPC1270H
	Q501-504	TRANSISTOR	2SA992
	Q505, 506	TRANSISTOR	2SA1145
	Q507, 508	TRANSISTOR	2SC2705
	Q509, 510	TRANSISTOR	2SC1740S
	Q511, 512	TRANSISTOR	2SC4793
	Q513, 514	TRANSISTOR	2SA1837
	Q514	TRANSISTOR	2SA1837
	Q520, 521	TRANSISTOR	2SA992
	Q522	TRANSISTOR	2SA1145
	Q523	TRANSISTOR	2SC2705
	Q524	TRANSISTOR	2SC1740S
	Q525	TRANSISTOR	2SC4793
	Q526	TRANSISTOR	2SA1837
	Q530	TRANSISTOR	2SC1740S
	Q531-533	TRANSISTOR	2SC2240
	Q534	TRANSISTOR	2SC1740S
	Q535, 536	TRANSISTOR	2SC3327
	Q537	TRANSISTOR	DTA143ES
	Q601	TRANSISTOR	DTC143ES
	Q602, 603	TRANSISTOR	2SC1740S
	Q604	TRANSISTOR	2SA933S
	Q605, 606	TRANSISTOR	DTC124ES
	Q607	TRANSISTOR	2SC2240
	Q608	TRANSISTOR	2SC1740S
	D501-520	DIODE	1SS252
	D521-524	ZENER DIODE	HZS36-2L
	D525-528	DIODE	1SS252
	D529, 530	ZENER DIODE	HZS36-2L
	D531-533	DIODE	1SS252
	D545-548	ZENER DIODE	MTZJ20
	D601-603	DIODE	1SS252
	D606	ZENER DIODE	HZS12AL

RELAYS

Mark	No.	Description	Parts No.
	RY501, 502	RELAY	ASR-112

COILS

Mark	No.	Description	Parts No.
	L501-503	COIL	ATH1004
	L504	COIL	ATH1011

CAPACITORS

Mark	No.	Description	Parts No.
	C501, 502	ELECT. CAPACITOR	CEAS4R7M50
	C503, 504	CERAMIC CAPACITOR	CKCYB102K50
	C505, 506	CERAMIC CAPACITOR	CKCYB681K50
	C507, 508	ELECT. CAPACITOR	CEAS220M16
	C509, 510	CERAMIC CAPACITOR	CCCSL220K500
	C511, 512	CERAMIC CAPACITOR	CCCSL050C500
	C513−516	CERAMIC CAPACITOR	CCCSL101K500
	C517	ELECT. CAPACITOR	CEAS101M16
	C521	ELECT. CAPACITOR	CEAS4R7M50
	C522	CERAMIC CAPACITOR	CKCYB102K50
	C523	CERAMIC CAPACITOR	CKCYB681K50
	C524	ELECT. CAPACITOR	CEAS220M16
	C525	CERAMIC CAPACITOR	CCCSL220K500
	C526	CERAMIC CAPACITOR	CCCSL050C500
	C527, 528	CERAMIC CAPACITOR	CCCSL101K500
	C529	ELECT. CAPACITOR	CEAS101M16
	C531	ELECT. CAPACITOR	CEHAQ2R2M50
	C532	CERAMIC CAPACITOR	CKCYB102K50
	C533	ELECT. CAPACITOR	CEHAQ101M10
	C534	CERAMIC CAPACITOR	CCCSL270J50
	C535	PLASTIC FILM CAPACITOR	CQMA333J50
	C536, 537	CERAMIC CAPACITOR	CKCYF103Z50
	C538	ELECT. CAPACITOR	CEHAQ100M2A
	C541, 542	ELECT. CAPACITOR	CEAS2R2M50
	C544	ELECT. CAPACITOR	CEAS2R2M50
	C545−548	AUDIO FILM CAPACITOR	CFTYA473J50
	C593	ELECT. CAPACITOR	CEAS2R2M50
	C601	ELECT. CAPACITOR	CEAS471M16
	C602	CERAMIC CAPACITOR	CKCYX103M25
	C603	ELECT. CAPACITOR	CEAS101M16
	C604	ELECT. CAPACITOR	CEHAQ470M50

RESISTORS

Mark	No.	Description	Parts No.
	R511, 512	CARBON FILM RESISTOR	RD1/4PM162J
	R513, 514	CARBON FILM RESISTOR	RD1/4PM473J
	R515, 516	CARBON FILM RESISTOR	RD1/4PM104J
	R517, 518	CARBON FILM RESISTOR	RD1/4PMF680J
	R519, 520	FUSIBLE RESISTOR	RFA1/4PS101J
	R525, 526	FUSIBLE RESISTOR	RFA1/4PS101J
	R527, 528	FUSIBLE RESISTOR	RFA1/4PS101J
	R529−532	CARBON FILM RESISTOR	RD1/4PMF101J
	R533, 534	RESISTOR (0.33, 5W)	ACN−139
	R546	CARBON FILM RESISTER	RD1/4PM301J
	R547	CARBON FILM RESISTOR	RD1/4PM473J
	R548	CARBON FILM RESISTOR	RD1/4PM104J
	R549	CARBON FILM RESISTOR	RD1/4PMF680J
	R550, 553	FUSIBLE RESISTOR	RFA1/4PS101J
	R554	FUSIBLE RESISTOR	RFA1/4PS101J
	R555, 556	CARBON FILM RESISTOR	RD1/4PMF101J
	R557	RESISTOR (0.33, 5W)	ACN−139
	R569	RESISTOR (0.22, 2W)	ACN−131
	R590−597	CARBON FILM RESISTOR	RD1/4PMF100J
	R606, 608	CARBON FILM RESISTOR	RD1/4PMF101J
	R611, 612	FUSIBLE RESISTOR	RFA1/4PS4R7J
	R613−616	CARBON FILM RESISTOR	RD1/4PMF4R7J
	R617, 618	FUSIBLE RESISTOR	RFA1/4PS4R7J
	R621, 622	FUSIBLE RESISTOR	RFA1/4PS4R7J
	R623, 624	CARBON FILM RESISTOR	RD1/4PMF4R7J
	R625, 626	FUSIBLE RESISTOR	RFA1/4PS4R7J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		CABLE HOLDER (4P)	AKT1077
	CN7	CONNECTOR (7P)	KPE7

FUNC ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC201	OP−AMP IC	NJM4558DXP
	IC203	ANALOG SWITCH IC	TC9273N−005
	IC204, 205	OP−AMP IC	NJM4558DXP
	Q201, 202	TRANSISTOR	2SC2878
	Q203	TRANSISTOR	DTA143ES

CAPACITORS

Mark	No.	Description	Parts No.
	C201	CERAMIC CAPACITOR	CKCYF103Z50
	C202	ELECT. CAPACITOR	CEAS010M50
	C203, 204	ELECT. CAPACITOR	CEAS100M50
	C205, 206	CERAMIC CAPACITOR	CCCSL221J50
	C207, 208	ELECT. CAPACITOR	CEAS101M16
	C209, 210	PLASTIC FILM CAPACITOR	CQMA822J50
	C211, 212	PLASTIC FILM CAPACITOR	CQMA242J50
	C213, 214	ELECT. CAPACITOR	CEAS2R2M50
	C215, 216	ELECT. CAPACITOR	CEAS100M50
	C217, 218	CERAMIC CAPACITOR	CKCYB102K50
	C221, 222	CERAMIC CAPACITOR	CKCYF103Z50
	C223, 224	ELECT. CAPACITOR	CEAS2R2M50
	C225, 226	ELECT. CAPACITOR	CEAS4R7M50
	C227, 228	ELECT. CAPACITOR	CEAS2R2M50
	C231, 232	ELECT. CAPACITOR	CEAS4R7M50

RESISTORS

Mark	No.	Description	Parts No.
		All Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN201	20P SOCKET	KP200IB20L
	CN8004	PIN JACK (6P)	AKB1209
	CN8005	PIN JACK (8P)	AKB1210

TRANS ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	D681, 682	DIODE	S5688G
	D683	DIODE	D3SBA20 (A)

CAPACITORS

Mark	No.	Description	Parts No.
	C681	CKA (0.01/AC250V)	ACG1005
	C791, 792	CKA (VSX−D503S/KU only)	CQMA333K250

RESISTORS

Mark	No.	Description	Parts No.
	R681	FUSIBLE RESISTOR	RFA1/4PS220J

OTHERS

Mark	No.	Description	Parts No.
	CN1	CONNECTOR (7P)	KPE7

VIDEO ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC401	VIDEO SEITCH	LA7952
	Q401	TRANSISTOR	2SC1740S
	Q402	TRANSISTOR	2SC2878
	Q403	TRANSISTOR	2SC1740S
	D401	DIODE	1SS252

CAPACITORS

Mark	No.	Description	Parts No.
	C401, 402	ELECT. CAPACITOR	CEAS4R7M50
	C403, 404	ELECT. CAPACITOR	CEAS471M6
	C405	ELECT. CAPACITOR	CEAS101M16
	C406	CERAMIC CAPACITOR	CKCYF473Z50
	C408	ELECT. CAPACITOR	CEAS101M16
	C409	CERAMIC CAPACITOR	CKCYF473Z50
	C410	ELECT. CAPACITOR	CEAS470M16
	C411	ELECT. CAPACITOR	CEAS101M16
	C412	CERAMIC CAPACITOR	CKCYF473Z50

RESISTORS

Mark	No.	Description	Parts No.
	R407, 411	CARBON FILM RESISTOR	RD1/4PM151J
	R412, 413	CARBON FILM RESISTOR	RD1/2PM271J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN401	4P SOCKET	KP200IB4L
	CN8008	PIN JACK (4P)	AKB1218

TONE ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC301	OP–AMP IC	NJM4558LD
	Q301, 302	TRANSISTOR	2SC2878
	Q304	TRANSISTOR	DTA143ES
	Q305, 306	TRANSISTOR	2SC2878

CAPACITORS

Mark	No.	Description	Parts No.
	C301, 302	ELECT. CAPACITOR	CEAS4R7M50
	C303, 304	ELECT. CAPACITOR	CEAS010M50
	C305, 306	ELECT. CAPACITOR	CEAS2R2M50
	C307, 308	CERAMIC CAPACITOR	CCCSL220J50
	C309, 310	ELECT. CAPACITOR	CEAS100M50
	C311, 312	AUDIO FILM CAPACITOR	CFTYA103J50
	C313, 314	AUDIO FILM CAPACITOR	CFTYA393J50
	C315, 316	PLASTIC FILM CAPACITOR	CQMA272J50
	C317, 318	AUDIO FILM CAPACITOR	CFTYA103J50

RESISTORS

Mark	No.	Description	Parts No.
	VR301	VARIABLE RESISTOR (500kΩ)	ACS1091
	VR302, 303	VARIABLE RESISTOR (100kΩ)	ACS1044
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		SHIELD CASE (MTL)	ANK1250
	CN1381	10P PLUG	KM200IB10

VOL ASSY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC304	OP–AMP IC	NJM4558DXP
	IC381	MECHANISM DRIVER IC	TA8409S
	IC382	OP–AMP IC	NJM4558DXP
	Q381, 382	TRANSISTOR	DTC143ES
	D391	ZENER DIODE	MTZJ5.1A

COILS

Mark	No.	Description	Parts No.
	L381, 382	AXIAL INDUCTOR	LAU220K

CAPACITORS

Mark	No.	Description	Parts No.
	C355, 356	ELECT. CAPACITOR	CEAS4R7M50
	C359, 360	ELECT. CAPACITOR	CEAS4R7M50
	C381	ELECT. CAPACITOR	CEAS470M16
	C383, 384	CERAMIC CAPACITOR	CKCYF473Z50
	C385, 386	ELECT. CAPACITOR	CEAS2R2M50
	C387, 388	AUDIO FILM CAPACITOR	CFTYA153J50
	C389, 390	AUDIO FILM CAPACITOR	CFTYA823J50
	C391, 392	ELECT. CAPACITOR	CEAS4R7M50

RESISTORS

Mark	No.	Description	Parts No.
	VR381	VARIABLE RESISTOR (100kΩ)	ACX1093
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN381	10P SOCKET	KP200IB10L
	CN8	CONNECTOR (5P)	KPE5

H. PHNE, SP. SW ASSY

SWITCH

Mark	No.	Description	Parts No.
	S670	PUSH SWITCH	SUL6LYXS

RESISTORS

Mark	No.	Description	Parts No.
	R671, 672	METAL OXIDE RESISTOR	RS2LMF331J

OTHERS

Mark	No.	Description	Parts No.
		JACK	AKN1002

FM/AM TUNER MODULE

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6201	AM/FM +MPX IC	LA1836M
	IC6202	PLL IC	LM7001J
	Q6101	DUAL GATE–FETA (CHIP)	3SK194
	Q6102	TRANSISTOR	2SC2223
	Q6103	TRANSISTOR	2SC2714
	Q6104	MOS–FET	2SK302
	Q6201	NCH–FET (SMD)	2SK208
	Q6202	TRANSISTOR	2SC2712
	Q6203	TRANSISTOR	2SC2235
	Q6204	TRANSISTOR	XDA124EK
	Q6214	TRANSISTOR	2SC2714
	Q6217	TRANSISTOR	XDC124EK
	D6101, 6102	VARI–CAP DIODE	1T33

COILS AND TRANSFORMER

Mark	No.	Description	Parts No.
	F6101	CERAMIC FILTER	ATF–155
	F6202	AM CERAMIC FILTER	ATF1155
	F6203, 6204	CERAMIC FILTER	ATF–119
	L6101	COIL	ATC1020
	L6102	COIL	ATC1021
	L6103	TIP COIL	ATH1043
	L6104	COIL	ATC1003
	L6202, 6203	CHIP COIL	LCTA2R2J3225
	L6207	FM DETECTION COIL	ATE1013–B
	L6208	CHIP COIL	LCTA2R2J3225
	T6101	FM IF TRANS.	ATE–063

CAPACITORS

Mark	No.	Description	Parts No.
	C6101	CHIP CAPACITOR	CCSQCH050C50
	C6102	CERAMIC CAPACITOR	CKSQYB103K50
	C6103	CHIP CAPACITOR	CKSQYB102K50
	C6105	CHIP CAPACITOR	CCSQTH150J50
	C6106	CHIP CAPACITOR	CKSQYB102K50
	C6107	CHIP CPAPCITOR	CCSCH010C50
	C6108	CHIP CAPACITOR	CCSQCH101J50
	C6109	CERAMIC CAPACITOR	CKSQYB103K50
	C6110	CHIP CAPACITOR	CCSQCH020C50
	C6111	CHIP CERAMIC C.	CCSQCH150J50
	C6112	CHIP CAPACITOR	CKSQYB102K50
	C6113	CHIP CAPACITOR	CCSQRH180J50
	C6114	CHIP CAPACITOR	CCSQRH080D50
	C6115	CHIP CAPACITOR	CCSQCH330J50
	C6116	CHIP CERAMIC C.	CCSQCH150J50
	C6117	CERAMIC CAPACITOR	CKSQYB103K50
	C6202	CERAMIC CAPACITOR	ACG1051
	C6203	CHIP CAPACITOR	CCSQCH101J50
	C6204	CHIP CAPACITOR	CKSQYB102K50
	C6208	CHIP CERAMIC C.	CCSQCH150J50
	C6209	CERAMIC CAPACITOR	CKSQYB473K50
	C6210	CERAMIC CAPACITOR	CKSQYB103K50
	C6212	CHIP CAPACITOR	CKSQYF103Z50
	C6213	CHIP CAPACITOR	CKSQYB223K50
	C6214	AUDIO FILM CAPACITOR	CFTXA224J50

Mark	No.	Description	Parts No.
	C6215	AUDIO FILM CAPACITOR	CFTXA103J50
	C6216, 6217	ELECT. CAPACITOR	CEAS330M16
	C6218	CHIP CAPACITOR	CKSQYF103Z50
	C6219	ELECT. CAPACITOR	CEAS470M10
	C6220	CHIP CAPACITOR	CKSQYF223Z50
	C6221, 6222	CHIP CERAMIC C.	CCSQCH150J50
	C6223	CHIP CAPACITOR	CKSYF103Z50
	C6224	ELECT. CAPACITOR	CEAS100M50
	C6225	CERAMIC CAPACITOR	CKSQYF473Z50
	C6226	CHIP CAPACITOR	CKSQYF223Z50
	C6227	ELECT. CAPACITOR	CEAS470M25
	C6228	CERAMIC CAPACITOR	CKSQYB472K50
	C6229	CERAMIC CHIP C.	CCSCH821J50
	C6230	CERAMIC CAPACITOR	CKSQYB333K50
	C6231	ELECT. CAPACITOR	CEAS100M50
	C6232	CERAMIC CAPACITOR	CKSYB333K50
	C6233	ELECT. CAPACITOR	CEAS100M50
	C6234	CERAMIC CAPACITOR	ACG1051
	C6235	CERAMIC CAPACITOR	ACG1052
	C6236	CERAMIC CAPACITOR	ACG1051
	C6237	CERAMIC CAPACITOR	CKSQYB473K50
	C6238	ELECT. CAPACITOR	CEJA100M16
	C6239	CHIP CAPACITOR	CKSQYF223Z50
	C6241	CERAMIC CAPACITOR	CKSQYF473Z50
	C6242	CHIP CAPACITOR	CKSQYF223Z50
	C6243−C6245	ELECT. CAPACITOR	CEAS470M16
	C6246	ELECT. CAPACITOR	CEAS100M50
	C6249, 6250	ELECT. CAPACITOR	CEJA4R7M35
	C6251	CHIP CAPACITOR	CKSYB472K50
	C6252	CERAMIC CAPACITOR	CKSQYB472K50
	C6255	CHIP CAPACITOR	CKSQYF223Z50
	C6261	ELECT. CAPACITOR	CEAS010M50
	C6262	ELECT. CAPACITOR	CEAS100M50
	C6263	CHIP CAPACITOR	CKSYF473Z50
	C6264	CERAMIC CAPACITOR	CKSQYB103K50
	C6265	CERAMIC CAPACITOR	CKSQYB473K50
	C6266	CERAMIC CAPACITOR	CKSQYF473Z50
	C6267	CERAMIC CAPACITOR	CKSQYB473K50
	C6268	CHIP CAPACITOR	CCSQCH101J50

RESISTORS

Mark	No.	Description	Parts No.
	VR6201	VARIABLE RESISTOR (10kΩ)	ACP1056
	VR6202	VARIABLE RESISTOR (22kΩ)	VRTB6VS223
	R6101	CHIP RESISTOR	RS1/8S470J
	R6113, 6116	CHIP RESISTOR	RS1/8S000J
	R6118	CHIP RESISTOR	RS1/8S000J
	R6209	CHIP RESISTOR	RS1/8S221J
	R6211	CHIP RESISTOR	RS1/8S103J
	R6237	CHIP RESISTOR	RS1/8S182J
	R6239	CHIP RESISTER	RS1/8S332J
	R6243, 6244	CHIP RESISTOR	RS1/8S101J
	R6268−6271	CHIP RESISTOR	RS1/8S000J
	R6275, 6276	CHIP RESISTOR	RS1/8S000J
	R6278, 6283	CHIP RESISTOR	RS1/8S000J
	R6284, 6290	CHIP RESISTOR	RS1/8S000J
	R6293, 6294	CHIP RESISTOR	RS1/8S000J
	R6297	CHIP RESISTOR	RS1/8S000J
	R6299, 6300	CARBON FILM RESISTOR	RD1/8PM102J
		Other Resistors	RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
		AM RF TUNING BLOCK	AXX1041
	BN6201	TERMINAL 4−P	AKA1016
	X6201	CRYSTAL RESONATOR	ASS1066
	X6202	CERAMIC RESONATOR	ATF1027
	X6203	CRYSTAL RESONATOR	ASS1042

PROLOGIC • SFC MODULE

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC2001	IC	LA2785
	IC2002	REGULATOR IC	NJM78M09FAS
	IC2003−2006	OP−AMP IC	NJM4558M−D
	IC2007	MEMORY IC	LC32464M−80
	IC2008	DF + DAC	LC78835M
	IC2010, 2011	OP−AMP IC	NJM4558M−D
	IC2012	LC83020	PDC017C
	IC2013	OP−AMP IC	NJM4558M−D
	IC2014	E−SW IC	TC9162N
	IC2015	83020 CONTROL UCOM	PDC018A
	IC2017	OP−AMP IC	NJM4558M−D
	IC2018	DF + DAC	LC78835M
	IC2019	REGULATOR IC	NJM78M05FAS
	Q2001	CHIP TR	2SA1162
	Q2002	DIGITAL TRANSISTOR	DTC124EK
	D2001, 2002	DIODE	1SS226
	D2004	DIODE	1SS226

COILS

Mark	No.	Description	Parts No.
	L2003	INDUCTOR	LTA102J
	L2004	FERRITE BEAD	ATX1008
	L2005	INDUCTOR	LTA102J
	L2006, 2010	FERRITE BEAD	ATX1008
	L2011, 2012	INDUCTOR	LTA473J
	L2013	CHIP COIL	LCTAR22J3225
	L2014	FERRITE BEAD	ATX1008
	L2015	CHIP COIL	LCTAR22J3225

CAPACITORS

Mark	No.	Description	Parts No.
	C2001	PLASTIC FILM CAPACITOR	CQMA223J50
	C2002	PLASTIC FILM CAPACITOR	CQMA473J50
	C2003	ELECT. CAPACITOR	CEAS221M16
	C2004−2007	ELECT. CAPACITOR	CEJA100M16
	C2008	ELECT. CAPACITOR	CEAS221M16
	C2009, 2010	ELECT. CAPACITOR	CEJA100M16
	C2011, 2012	AUDIO FILM CAPACITOR	CFTXA104J50
	C2013	ELECT. CAPACITOR	CEJAR47M50
	C2014	ELECT. CAPACITOR	CEANL4R7M50
	C2015	ELECT. CAPACITOR	CEJAR47M50
	C2016	ELECT. CAPACITOR	CEANL4R7M50
	C2017	AUDIO FILM CAPACITOR	CFTYA154J50
	C2018	ELECT. CAPACITOR	CEANL3R3M50
	C2019, 2020	AUDIO FILM CAPACITOR	CFTXA154J50
	C2021	ELECT. CAPACITOR	CEANL3R3M50
	C2022	AUDIO FILM CAPACITOR	CFTYA154J50
	C2023	ELECT. CAPACITOR	CEANL4R7M50
	C2024	ELECT. CAPACITOR	CEJAR47M50
	C2025	ELECT. CAPACITOR	CEANL4R7M50
	C2026	ELECT. CAPACITOR	CEJAR47M50
	C2027, 2028	AUDIO FILM CAPACITOR	CFTXA104J50
	C2029	ELECT. CAPACITOR	CEAS470M10
	C2030	AUDIO FILM CAPACITOR	CFTXA474J50
	C2031	CERAMIC CAPACITOR	CKSQYF104Z50
	C2032−2034	ELECT. CAPACITOR	CEJA100M16

Mark	No.	Description	Parts No.
	C2035	PLASTIC FILM CAPACITOR	CQMA681J50
	C2036	CHIP CAPACITOR	CCSQCH101J50
	C2037	ELECT. CAPACITOR	CEAS221M10
	C2038	CERAMIC CAPACITOR	CKSQYB473K50
	C2039	ELECT. CAPACITOR	CEAS331M16
	C2040	CERAMIC CAPACITOR	CKSQYB473K50
	C2041, 2042	CHIP CAPACITOR	CCSQCH102J50
	C2043, 2044	CHIP CERAMIC C.	CCSQCH471J50
	C2045, 2046	CHIP CAPACITOR	CKSQYB222K50
	C2047, 2048	ELECT. CAPACITOR	CEAS100M50
	C2051, 2052	ELECT. CAPACITOR	CEAS2R2M50
	C2053	ELECT. CAPACITOR	CEAS100M50
	C2054	ELECT. CAPACITOR	CEAS2R2M50
	C2055	CERAMIC CAPACITOR	CKSQYB473K25
	C2056	ELECT. CAPACITOR	CEAS470M10
	C2057	CERAMIC CAPACITOR	CKSQYB473K25
	C2058	ELECT. CAPACITOR	CEAS100M50
	C2059	CERAMIC CAPACITOR	CKSQYF104Z50
	C2060	ELECT. CAPACITOR	CEAS101M10
	C2061, 2062	CERAMIC CAPACITOR	CKSQYF104Z50
	C2064	ELECT. CAPACITOR	CEAS100M50
	C2065	CERAMIC CAPACITOR	CKSQYF104Z50
	C2066	ELECT. CAPACITOR	CEAS101M10
	C2067	ELECT. CAPACITOR	CEAS2R2M50
	C2068, 2069	ELECT. CAPACITOR	CEAS220M25
	C2070, 2071	CHIP CAPACITOR	CKSQYB102K50
	C2072, 2073	ELECT. CAPACITOR	CEAS010M50
	C2074, 2075	CERAMIC CAPACITOR	CKSQYB472K50
	C2076, 2077	ELECT. CAPACITOR	CEAS330M16
	C2078, 2079	CERAMIC CAPACITOR	CKSQYB103K50
	C2080, 2081	CHIP CERAMIC C.	CCSQCH471J50
	C2082, 2083	CHIP CAPACITOR	CCSQCH680J50
	C2084, 2085	CHIP CAPACITOR	CCSQCH080D50
	C2086, 2087	CERAMIC CAPACITOR	CKSQYB103K50
	C2089	CERAMIC CAPACITOR	CKSQYB473K25
	C2090, 2091	CERAMIC CAPACITOR	CKSQYB103K50
	C2092	ELECT. CAPACITOR	CEAS470M10
	C2093	CERAMIC CAPACITOR	CKSQYB473K25
	C2095	CERAMIC CAPACITOR	CKSQYB472K50
	C2096	CERAMIC CAPACITOR	CKSQYF104Z50
	C2097	CHIP CAPACITOR	CKSQYB102K50
	C2100	CHIP CAPACITOR	CKSQYB222K50
	C2101	CERAMIC CAPACITOR	CKSQYB471K50
	C2102	ELECT. CAPACITOR	CEAS100M50
	C2103	ELECT. CAPACITOR	CEAS2R2M50
	C2104	ELECT. CAPACITOR	CEAS100M50
	C2105	ELECT. CAPACITOR	CEAS220M16
	C2106	ELECT. CAPACITOR	CEAS100M50
	C2107	CERAMIC CAPACITOR	CKSQYF104Z50
	C2108	CHIP CAPACITOR	CCSQCH101J50
	C2109	CERAMIC CAPACITOR	CKSQYF104Z50
	C2110	CERAMIC CAPACITOR	CKSQYB472K50
	C2111	CERAMIC CAPACITOR	CKSQYB103K50
	C2112	ELECT. CAPACITOR	CEAS470M25
	C2113	CHIP CAPACITOR	CCSQCH101J50
	C2122	ELECT. CAPACITOR	CEANP101M16
	C2123	ELECT. CAPACITOR	CEAS221M16
	C2126	ELECT. CAPACITOR	CEANP101M16
	C2127	ELECT. CAPACITOR	CEAS221M16
	C2129	CERAMIC CAPACITOR	CKSQYF104Z50
	C2130	ELECT. CAPACITOR	CEAS100M50
	C2134	CERAMIC CAPACITOR	CKSQYF104Z50
	C2135	ELECT. CAPACITOR	CEAS100M50
	C2136	CERAMIC CAPACITOR	CKSQYF104Z50
	C2138	ELECT. CAPACITOR	CEAS471M10

Mark	No.	Description	Parts No.
	C2140−2142	CERAMIC CAPACITOR	CKSQYB182K50
	C2153	ELECT. CAPACITOR	CEAS101M10
	C2154	CERAMIC CAPACITOR	CKSQYB473K50
	C2155	CERAMIC CAPACITOR	CKSQYB472K50
	C2158, 2159	CERAMIC CAPACITOR	CKSQYB104K25
	C2161, 2162	CERAMIC CAPACITOR	CKSQYB104K25
	C2163	CHIP CAPACITOR	CCSQCH470J50
	C2164	CHIP CERAMIC C.	CCSQCH150J50
	C2165	CERAMIC CAPACITOR	CKSQYB473K25
	C2166	ELECT. CAPACITOR	CEAS221M10
	C2167	CHIP CERAMIC C.	CCSQCH150J50
	C2168	CHIP CAPACITOR	CCSQCH040C50

RESISTORS

Mark	No.	Description	Parts No.
	R2148	CARBON FILM RESISTOR	RD1/2PMFL4R7J
		Other Resistors	RS1/10S□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN2001	15P SOCKET	KP200IB15L
	X2001	CRYSTAL RESONATOR	ASS1114
	X2002	CERAMIC RESONATOR	ASS1018

5. ADJUSTMENTS

ADJUSTMENT OF THE FM TUNER SECTION

- Set the FM/AM selector to FM BAND.
- Connect the wiring as shown in the Fig.1.

Step No.	Adjustment Title	FM SG (1kHz,±75kHz dev.)		Reception Frequency Display	Adjustment	
		Frequency (MHz)	Level (dBμ V)		Adjustment Location	Specifications
1	Center adjustment	98	80	98.0MHz	L6207	Adjust so that DC voltage between the IC6201-pin4 and pin 28(or⊕leads of C6224 and C6261) becomes 0V±50mV.
2	Front-end sensitivity adjustment	98	Low input (0 to 30)	98.0MHz	L6102 T6101	Adjust so that the DC voltage between the IC6201- pin12 and GND(or⊕lead of C6238 and GND) becomes maximum level.
3	TUNED IND. Lighting level	98	15 (±2dB)	98.0MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

ADJUSTMENT OF MW TUNER SECTION

- Set the FM/AM selector to AM(MW)BAND.
- Connect the wiring as shown in the Fig.1.

Step No.	Adjustment Title	AM SG (400Hz,30% Mod.)		Reception Frequency Display	Adjustment	
		Frequency (kHz)	Level (dBμ V/m)		Adjustment Location	Specifications
1	TUNED IND. Lighting level	999 *1	47(±2dB)	999kHz *1	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

**1 : For the area using 10kHz step, frequencies should be 1000kHz.*

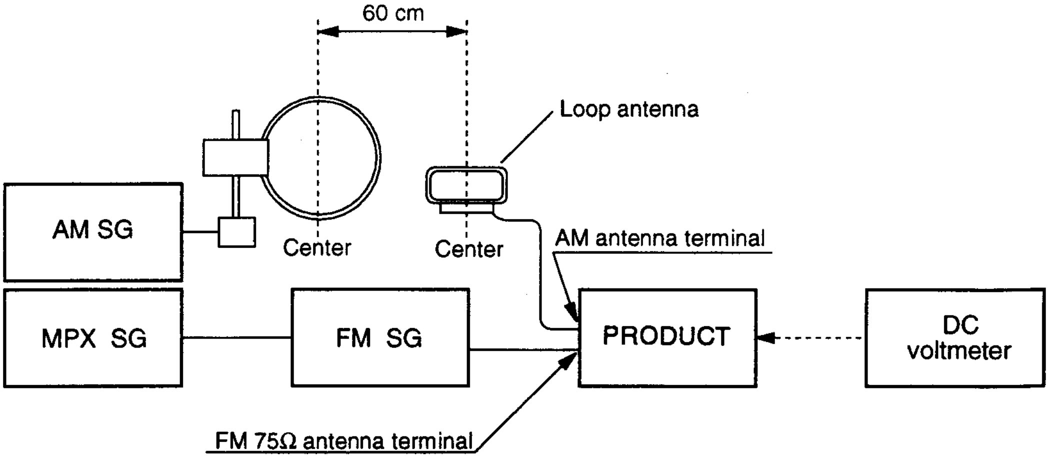


Fig. 1 AM and FM adjustment wiring diagram

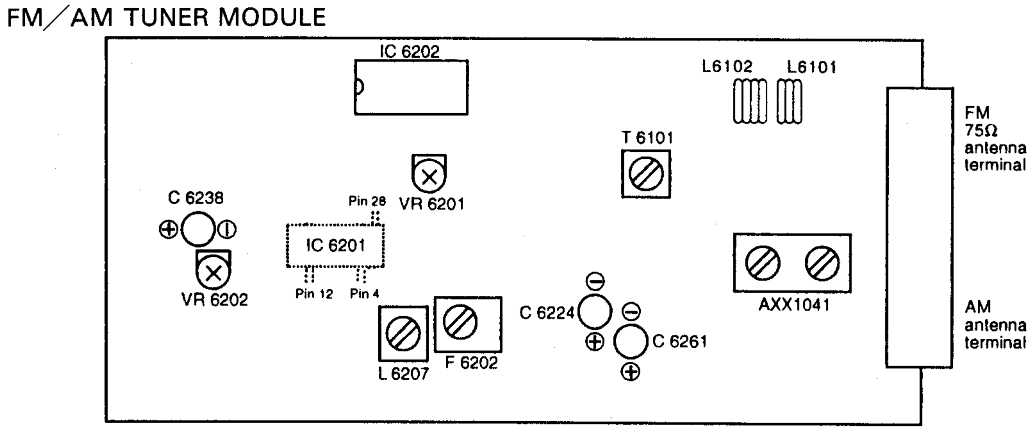

FM/AM TUNER MODULE
IC 6202
L6102
L6101
T 6101
FM
75Ω
antenna
terminal
C 6238
Pin 28
VR 6201
IC 6201
VR 6202
Pin 12
Pin 4
C 6224
C 6261
AXX1041
L 6207
F 6202
AM
antenna
terminal

Fig. 2 Adjustment location

6. DISASSEMBLY

● POWER. AMP ASSY

Step1. Disconnect the AC power cord.

Step2. Remove the bonnet case.

Step3. Remove the screws Ⓐ through Ⓓ, which fasten the heat sink of the POWER. AMP assembly.

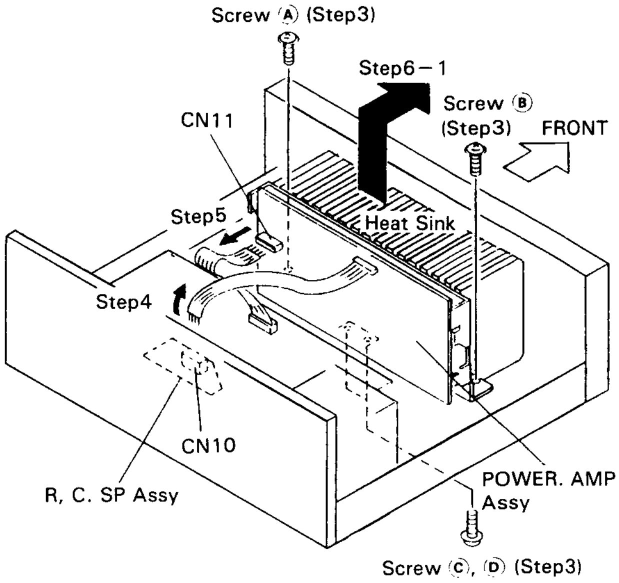
Step4. Disconnect the cable from CN10 of the R, C. SP assembly.

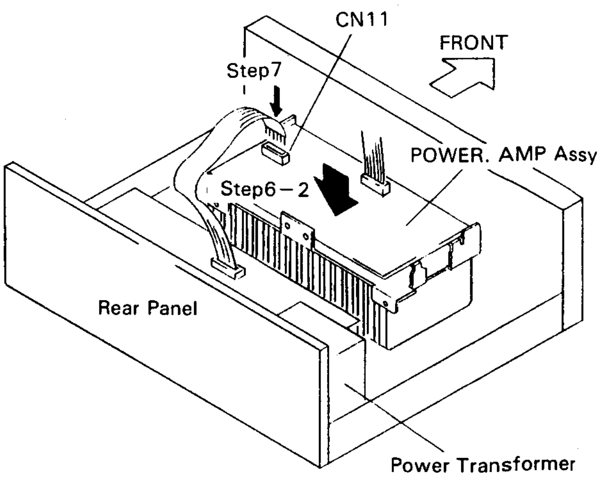
Step5. Disconnect the cable from CN11 of the POWER. AMP assembly by raising the assembly slightly.

Step6. Continue to raise the assembly and rotate it so that the fins of the heat sink face the bottom. Then return the assembly to its original position. (Avoid shorting the assembly by inserting insulation sheets or the like between the assembly and other assemblies.)

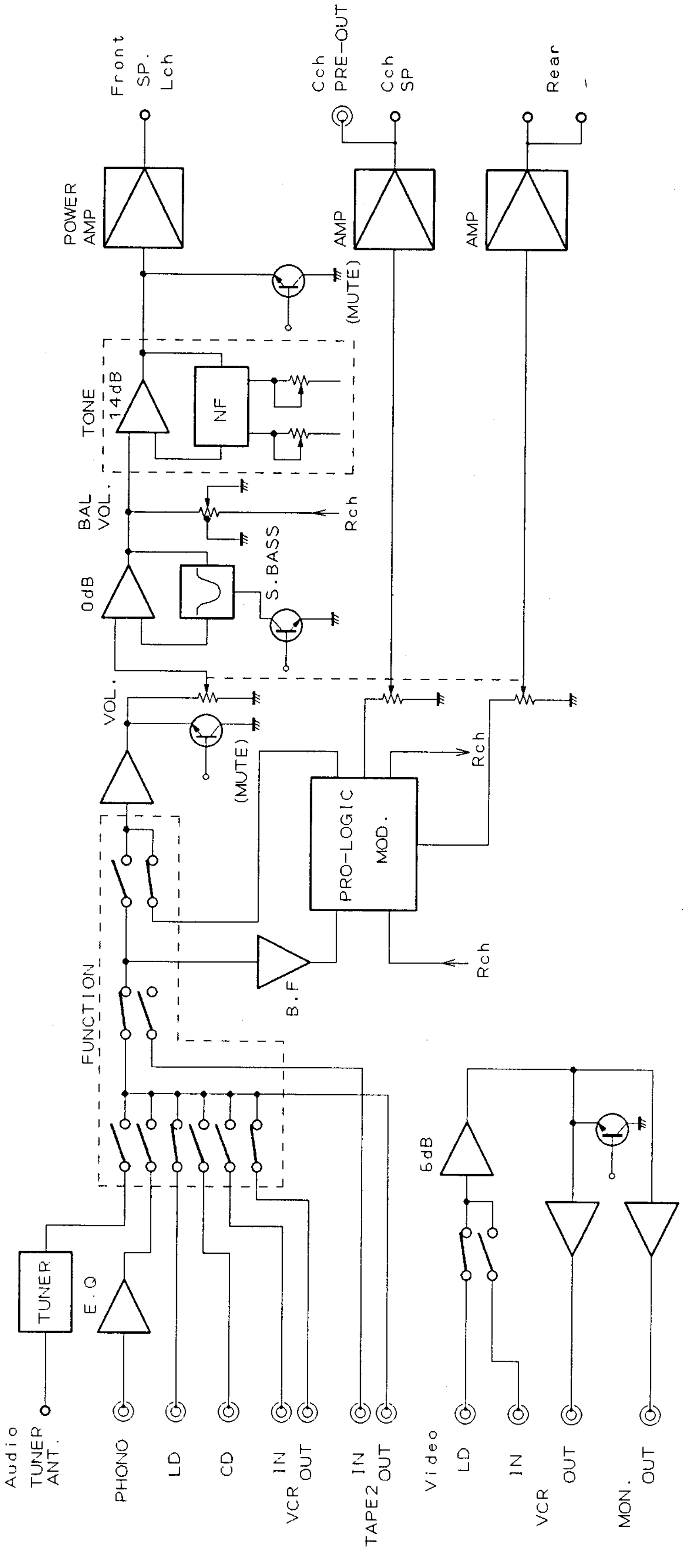
Step7. Re-connect the cable to CN11.

Note :
It is not necessary to re-connect the cable to CN10 of the R, C. SP assembly to check the POWER. AMP assembly.


Screw Ⓐ (Step3)
Step6－1
Screw Ⓑ (Step3)
FRONT
CN11
Heat Sink
Step5
Step4
CN10
R, C. SP Assy
POWER. AMP Assy
Screw Ⓒ, Ⓓ (Step3)


CN11
FRONT
Step7
POWER. AMP Assy
Step6－2
Rear Panel
Power Transformer

7. BLOCK DIAGRAM

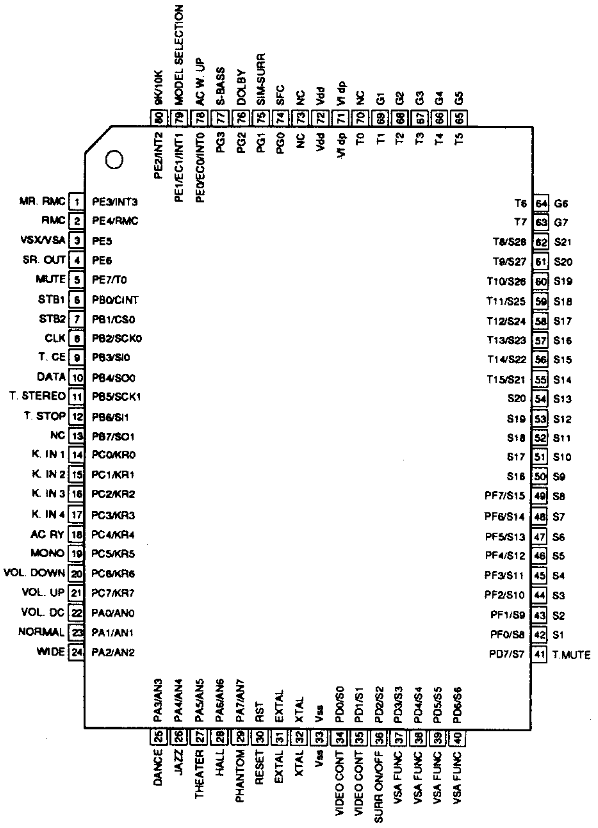

Front SP. Lch
Cch PRE-OUT
Cch SP
Rear
POWER AMP
AMP
AMP
(MUTE)
TONE 14dB
NF
BAL VOL.
Rch
0dB
S.BASS
VOL.
(MUTE)
Rch
PRO-LOGIC MOD.
Rch
FUNCTION
B.F
6dB
TUNER
E.Q
Audio
TUNER ANT.
PHONO
LD
CD
IN
VCR
OUT
IN
TAPE2
OUT
Video
LD
IN
VCR
OUT
MON. OUT

8. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

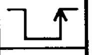
■ PDG126B (IC801) Digital Delay

●Block diagram


MR. RMC 1 PE3/INT3
RMC 2 PE4/RMC
VSX/VSA 3 PE5
SR. OUT 4 PE6
MUTE 5 PE7/T0
STB1 6 PB0/CINT
STB2 7 PB1/CS0
CLK 8 PB2/SCK0
T. CE 9 PB3/SI0
DATA 10 PB4/SO0
T. STEREO 11 PB5/SCK1
T. STOP 12 PB6/SI1
NC 13 PB7/SO1
K. IN 1 14 PC0/KR0
K. IN 2 15 PC1/KR1
K. IN 3 16 PC2/KR2
K. IN 4 17 PC3/KR3
AC RY 18 PC4/KR4
MONO 19 PC5/KR5
VOL. DOWN 20 PC6/KR6
VOL. UP 21 PC7/KR7
VOL. DC 22 PA0/AN0
NORMAL 23 PA1/AN1
WIDE 24 PA2/AN2
DANCE 25 PA3/AN3
JAZZ 26 PA4/AN4
THEATER 27 PA5/AN5
HALL 28 PA6/AN6
PHANTOM 29 PA7/AN7
RESET 30 RST
EXTAL 31 EXTAL
XTAL 32 XTAL
Vss 33 Vss
VIDEO CONT 34 PD0/S0
VIDEO CONT 35 PD1/S1
SURR ON/OFF 36 PD2/S2
VSA FUNC 37 PD3/S3
VSA FUNC 38 PD4/S4
VSA FUNC 39 PD5/S5
VSA FUNC 40 PD6/S6
T.MUTE 41 PD7/S7
S1 42 PF0/S8
S2 43 PF1/S9
S3 44 PF2/S10
S4 45 PF3/S11
S5 46 PF4/S12
S6 47 PF5/S13
S7 48 PF6/S14
S8 49 PF7/S15
S9 50 S16
S10 51 S17
S11 52 S18
S12 53 S19
S13 54 S20
S14 55 T15/S21
S15 56 T14/S22
S16 57 T13/S23
S17 58 T12/S24
S18 59 T11/S25
S19 60 T10/S26
S20 61 T9/S27
S21 62 T8/S28
G7 63 T7
G6 64 T6
G5 65 T5
G4 66 T4
G3 67 T3
G2 68 T2
G1 69 T1
NC 70 T0
Vf dp 71 Vf dp
Vdd 72 Vdd
NC 73 NC
SFC 74 PG0
SIM-SURR 75 PG1
DOLBY 76 PG2
S-BASS 77 PG3
AC W. UP 78 PE0/EC0/INT0
MODEL SELECTION 79 PE1/EC1/INT1
9K/10K 80 PE2/INT2

●Pin Function

No	Pin name	I/O	Function	ACTIVE
1	PE3/INT3 MR. RMC	I	Remote control unit signal input from sub-room	L
2	PE4/RMC RMC	I	Remote control unit signal input	H
3	PE5 VSX/VSA	I	VSX/VSA, VSP select (L/H)	
4	PE6 SR. OUT	O	SR output from Remote control signal	H
5	PE7/T0 MUTE	O	MUTE	H
6	PB0/CINT STB1	O	CE (LA2785, LV1010, LV1020) output for SURROUND IC	L
7	PB1/CS0 STB2	O	STROBE output for function IC	H
8	PB2/SCK0 CLK	O	CLOCK output	
9	PB3/SI0 T. CE	O	PLL IC (LLM7001) CE	H
10	PB4/SO0 DATA	O	DATA output	
11	PB5/SCK1 T. STEREO	I	TUNER STEREO ON/OFF	L
12	PB6/SI1 T. STOP	I	TUNED input	L
13	PB7/SO1 NC		NC	
14	PC0/KR0 K. IN 1	I	KEY scan input 1	H
15	PC1/KR1 K. IN 2	I	KEY scan input 2	H
16	PC2/KR2 K. IN 3	I	KEY scan input 3	H
17	PC3/KR3 K. IN 4	I	KEY scan input 4	H
18	PC4/KR4 AC RY	O	AC relay output	H
19	PC5/KR5 MONO	O	FM MONO	H
20	PC6/KR6 VOL. DOWN	O	VOLUME DOWN	H

21	PC7/KR7 VOL. UP	O	VOLUME UP	H
22	PA0/AN0 VOL. DC	I	VOLUME position selection	
23	PA1/AN1 NORMAL	O	CENTER MODE display (NORMAL)	H
24	PA2/AN2 WIDE	O	CENTER MODE display (WIDE)	H
25	PA3/AN3 DANCE	O	VSX : SFC MODE display (DANCE) VSA, VSP : SURR MODE display (3CH LOGIC)	H
26	PA4/AN4 JAZZ	O	SFC MODE display (JAZZ)	H
27	PA5/AN5 THEATER	O	VSX : SFC MODE display (THATER) VSA, VSP : MONO OUT MUTE	H L
28	PA6/AN6 HALL	O	SFC MODE display (HALL)	H
29	PA7/AN7 PHANTOM	O	CENTER MODE display (PHANTOM)	H
30	RST RESET	I	RESET input	
31	EXTAL EXTAL	I	oscillator 8MHz	
32	XTAL XTAL	O		
33	Vss Vss		GND	
34	PD0/S0 VIDEO CONT	O	VIDEO CONTROL	
35	PD1/S1 VIDEO CONT	O	VIDEO CONTROL	
36	PD2/S2 SURR ON/OFF	O	SURROUND ON/OFF	H
37	PD3/S3 VSA FUNC	O	VSA, VSP FUNCTION (INH A)	H
38	PD4/S4 VSA FUNC	O	VSA, VSP FUNCTION (INH V)	H
39	PD5/S5 VSA FUNC	O	VSA, VSP FUNCTION (A)	H
40	PD6/S6 VSA FUNC	O	VSA, VSP FUNCTION (B)	H
41	PD7/S7 T. MUTE	O	VSX : mute for TUNER VSA, VSP : -20dB MUTE	H
42	PF0/S8 S1/ K. OUT1	O	FL segment output1/KEY scan output1	H
43	PF1/S9 S2/ K. OUT2	O	FL segment output2/KEY scan output2	H
44	PF2/S10 S3/K. OUT3	O	FL segment output3/KEY scan output3	H
45	PF3/S11 S4/K. OUT4	O	FL segment output4/KEY scan output4	H
46	PF4/S12 S5/K. OUT5	O	FL segment output5/KEY scan output5	H
47	PF5/S13 S6/K. OUT6	O	FL segment output6/KEY scan output6	H
48	PF6/S14 S7/K. OUT7	O	FL segment output7/KEY scan output7	H
49	PF7/S15 S8/K. OUT8	O	FL segment output8/KEY scan output8	H
50	S16 S9/K. OUT9	O	FL segment output9/KEY scan output9	H

51	S17 S10/K. OUT10	O	FL segment output10/KEY scan output10	H
52	S18 S11/K. OUT11	O	FL segment output11/KEY scan output11	H
53	S19 S12/K. OUT12	O	FL segment output12/KEY scan output12 (VSA, VSP)	H
54	S20 S13/K. OUT13	O	FL segment output13/KEY scan output13 (VSA, VSP)	H
55	T15/S21 S14	O	FL segment output14	H
56	T14/S22 S15	O	FL segment output15	H
57	T13/S23 S16	O	FL segment output16	H
58	T12/S24 S17	O	FL segment output17	H
59	T11/S25 S18	O	FL segment output18	H
60	T10/S26 S19	O	FL segment output19	H
61	T9/S27 S20	O	FL segment output20	H
62	T8/S28 S21	O	FL segment output21	H
63	T7 G7	O	FL grid output7	H
64	T6 G6	O	FL grid output6	H
65	T5 G5	O	FL grid output5	H
66	T4 G4	O	FL grid output4	H
67	T3 G3	O	FL grid output3	H
68	T2 G2	O	FL grid output2	H
69	T1 G1	O	FL grid output1	H
70	T0 NC		NC	
71	Vf dp Vf dp		Power supply for FL	
72	Vdd Vdd		Power supply +5V	
73	NC NC		+5V	
74	PG0 SFC	O	K-112 : SURR MODE display (SFC) other than K-112 : SURR MODE display (STUDIO)	H
75	PG1 SIM-SURR	O	SURR MODE display (SUMULATED SURROUND)	H
76	PG2 DOLBY	O	SURR MODE display (DOLBY PRO LOGIC)	H
77	PG3 S-BASS	O	VSX : S-BASS ON/OFF VSA, VSP : LOUDNESS ON/OFF	H
78	PE0/EC0/INT0 AC W. UP	I	AC pulse input	
79	PE1/EC1/INT1 MODEL SELECTION	I	VSX : K-112/K-113, K-114 selection (H/L) VSA, VSP : K-119/K-152 selection (L/H)	
80	PE2/INT2 9K/10K	I	VSX : 9K/10K selection (H/L) VSA, VSP : EX/J selection (L/H)	

9. REMOTE CONTROL UNIT [CU–VSX084 (AXD1385)]
[CU–VSX082 (AXD1384)]

9.1 FOR CU – VSX084 (AXD1385)

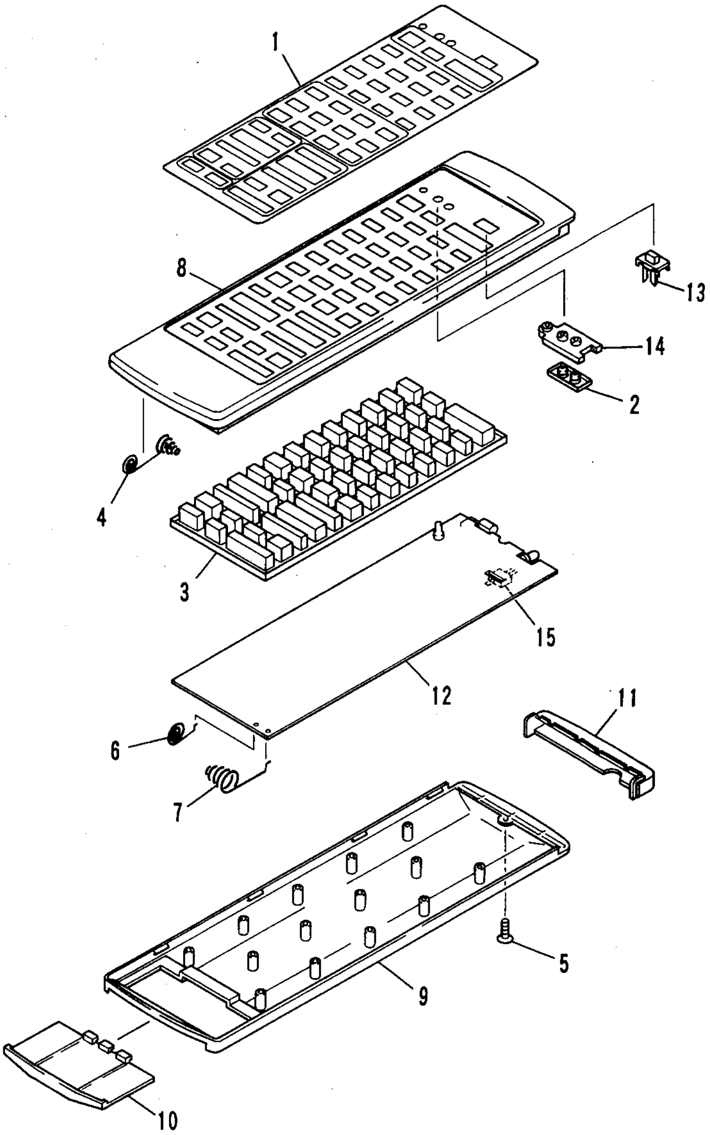
■ EXPLODED VIEW AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List

Mark	No.	Description	Parts No.
	1	PLATE	AZA1984
	2	RUBBER SHEET (A) (S102)	AZA1985
	3	RUBBER SHEET (B) (S103)	AZA1986
	4	TERMINAL	AZB1334
	5	SCREW	AZB1335
	6	TERMINAL (A)	AZB1379
	7	TERMINAL (B)	AZB1380
	8	CASE (A)	AZN2254
	9	CASE (B)	AZN2255
	10	BATTERY COVER	AZN2256
	11	FILTER	AZN2257
NSP	12	P. C. BOARD	AZN2258
	13	KNOB (VIDEO/AUDIO)	AZN2259
	14	FRAME	AZN2260
	15	SLIDE SW (S101)	AZS1134



■ PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

$560\Omega \rightarrow 56 \times 10^{1} \rightarrow 561$ ······················· *RD1/8PM* $\boxed{5}\,\boxed{6}\,\boxed{1}$ *J*
$47k\Omega \rightarrow 47 \times 10^{3} \rightarrow 473$ ······················· *RD1/4PS* $\boxed{4}\,\boxed{7}\,\boxed{3}$ *J*
$0.5\Omega \rightarrow 0R5$ ··· *RN2H* $\boxed{0}\,\boxed{R}\,\boxed{5}$ *K*
$1\Omega \rightarrow 010$ ··· *RS1P* $\boxed{0}\,\boxed{1}\,\boxed{0}$ *K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62k\Omega \rightarrow 562 \times 10^{1} \rightarrow 5621$ ················· *RM1/4PC* $\boxed{5}\,\boxed{6}\,\boxed{2}\,\boxed{1}$ *F*

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1	μ–COM	AZC1841
	IC2	IC	PST9121N
	Q1	CHIP TRANSISTOR	2SC3265
	D1	LED	SE303A–C
	D2	CHIP DIODE	RLS73
	D3	DIODE	SPS–503C–3
	D4, 5	CHIP DIODE	RLS73
	D6	LED	SLC–22VR
CAPACITORS			
	C1	ELECT. CAPACITOR	CEAS221M25
	C2	ELECT. CAPACITOR	CEAS101M10
	C3	ELECT. CAPACITOR	CEAS0R1M50
	C4, 5	CERAMIC CAPACITOR	CCDSL330J50
	C6	ELECT. CAPACITOR	CEAS101M10
	C7	CERAMIC CAPACITOR	CCDSL101J50
	C8	ELECT. CAPACITOR	CEAS0R1M50
RESISTORS			
	R1	CARBON FILM RESISTOR	RD1/4PM020J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	FCR4.0MC3

PCB PATTERN

A

[ ] : Indicates a chip resistor.

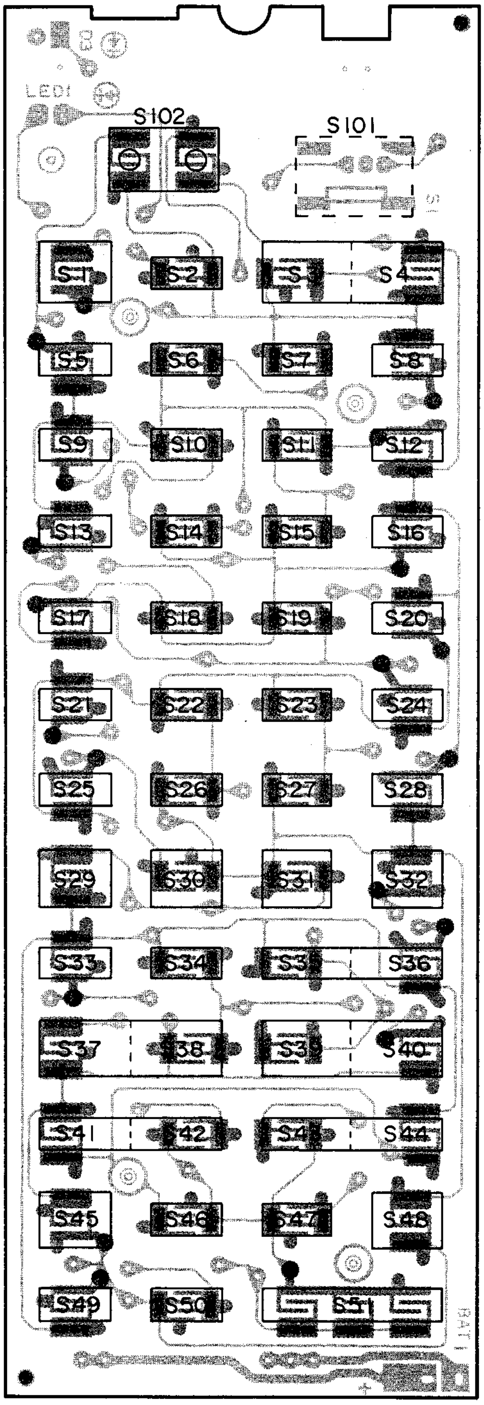
[ ] : Indicates a chip capacitor.

—| : Indicates a chip transistor.

⊕ : Indicates a chip diode.

A

B


LED1
S102
S101
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S32
S33
S34
S35
S36
S37
S38
S39
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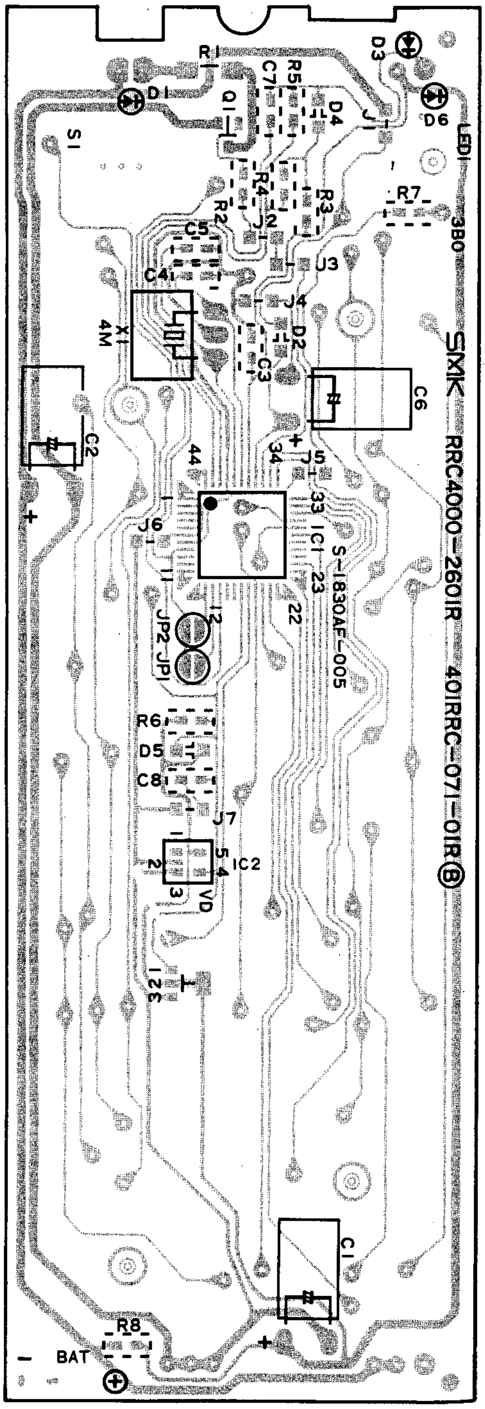
S41
S42
S43
S44
S45
S46
S47
S48
S49
S50
S51
BAT


R1
D3
C7
R5
D1
Q1
D4
J1
D6
LED1
S1
R4
R3
R7
R2
J2
3B0
C5
J3
C4
J4
X1
4M
D2
C3
SMK
C6
C2
RRC4000-2601R 401RRC-071-01R Ⓑ
44
34
J5
33
IC1
S-1830AF-005
J6
23
22
1
11
12
JP2
JP1
R6
D5
C8
J7
IC2
5
4
2
3
VD
1
2
3
C1
R8
BAT
+
-

B

C

C

D

D

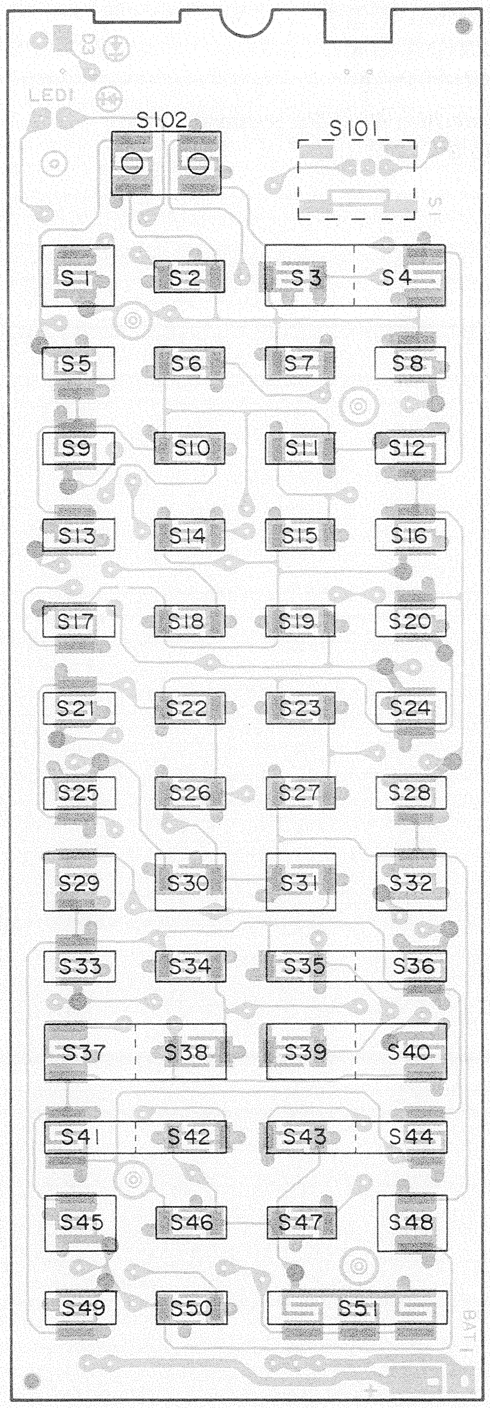
■ PCB PATTERN

▭ : Indicates a chip resistor.

▭ : Indicates a chip capacitor.

⊣ : Indicates a chip transistor.

⊕ : Indicates a chip diode.


LED1
D3
S102
S101
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
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S22
S23
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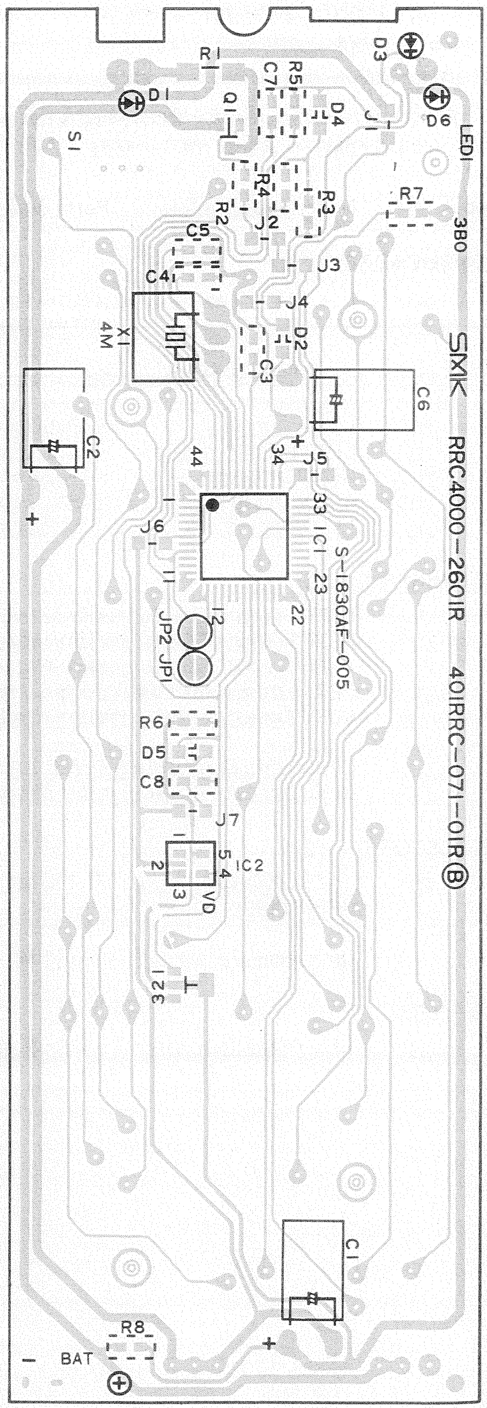
S30
S31
S32
S33
S34
S35
S36
S37
S38
S39
S40
S41
S42
S43
S44
S45
S46
S47
S48
S49
S50
S51
BAT


R1
D3
C7
R5
D1
Q1
D4
J1
D6
LED1
S1
R4
R3
R2
J2
R7
3B0
C5
C4
J3
X1
4M
J4
D2
C3
C6
SMK
RRC4000-2601R
401RRC-071-01R Ⓑ
C2
+
44
34
J5
+
33
IC1
S-1830AF-005
23
J6
11
12
22
JP2
JP1
R6
D5
C8
J7
IC2
5 4
2
3
VD
3 2 1
C1
R8
−
BAT
+
⊕

SCHEMATIC DIAGRAM

NOTE

▭ : Indicates a chip resistor.

▮ : Indicates a chip capacitor.

: Indicates a chip transistor.

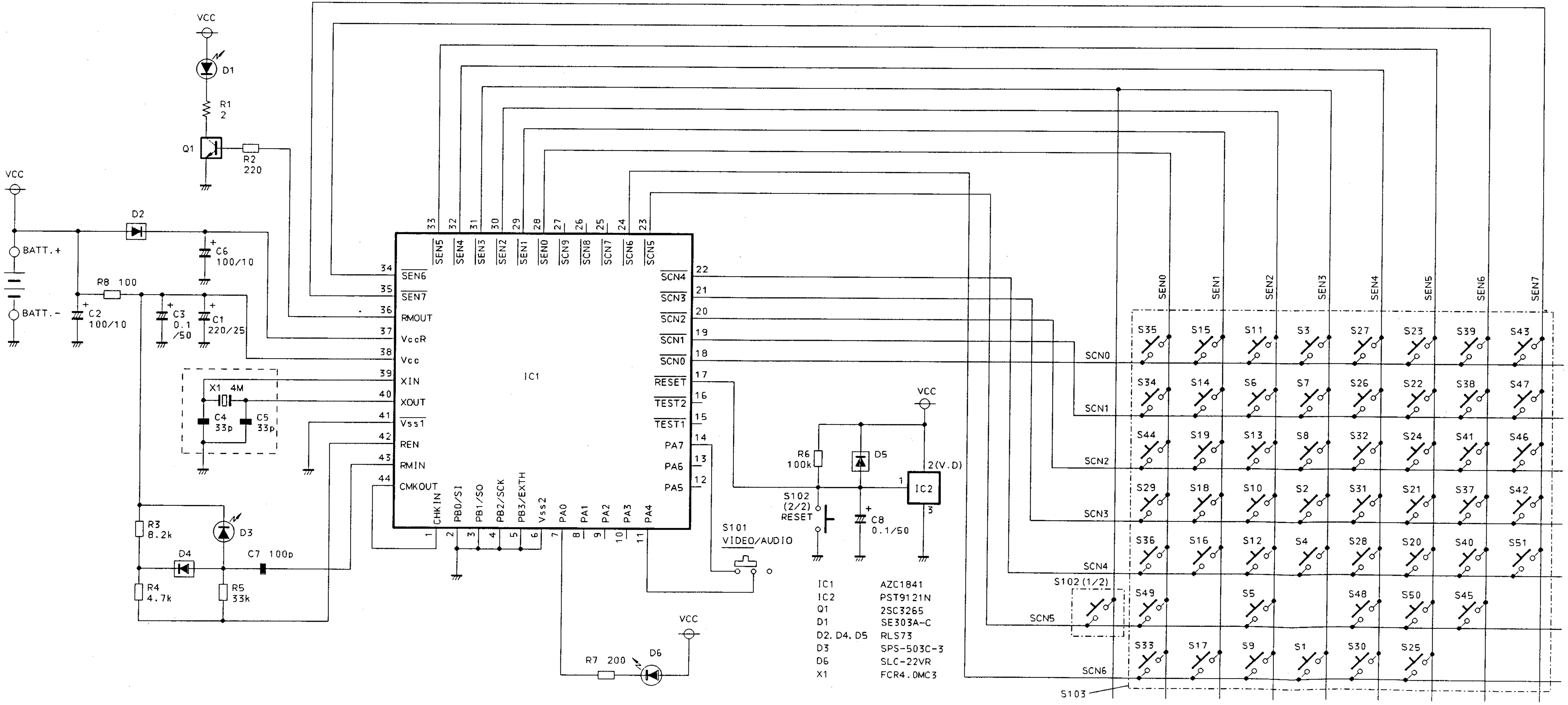
: Indicates a chip diode.

NOTE FOR SCHEMATIC DIAGRAMS (Type 2A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ● : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH–□ ON THE SCHEMATIC DIAGRAM:**
   - SCH–□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

S101: AUDIO/VIDEO
S102: LEARN·RESET
S1: RECEIVER POWER
S2: MUTING
S3: MUSTER VOLUME –
S4: MUSTER VOLUME +
S5: TV POWER
S6: 1
S7: 2
S8: 3
S9: BAND TV FUNC
S10: 4
S11: 5
S12: 6
S13: 0/10
S14: 7
S15: 8
S16: 9
S17: FREQUENCY TV VOLUME –
S18: FREQUENCY TV VOLUME +
S19: STATION TV CHANNEL –
S20: STATION TV CHANNEL +
(S5–S20: TUNER/TV)
S21: SURR MODE
S22: 3CH LOGIC
S23: TEST TONE
S24: CENTER MODE (DELAY TIME)
S25: CENTER LEVEL·REAR LEVEL –
S26: CENTER LEVEL·REAR LEVEL +
S27: EFECT LEVEL –
S28: EFECT LEVEL +
S29: FUNCTION
S30: TAPE2 MONITOR
S31: DIRECT V.SEL
S32: SLEEP RETURN
S33: DISC SELECT – (DISC SIDE A) CD/LD
S34: DISC SELECT + (DISC SIDE B)
S35: DECK I (VCR CH –) TAPE/VCR
S36: DECK II (VCR CH +)
S37: ■ CD/LD
S38: ▶
S39: ◀ TAPE/VCR
S40: ▶
S41: ⏮ (◀◀) CD/LD
S42: ⏭ (▶▶)
S43: ◀◀ TAPE/VCR
S44: ▶▶
S45: POWER CD/LD
S46: ⏸
S47: ■ TAPE/VCR
S48: POWER
S49: ASC1
S50: ASC2
S51: TAPE SELECT TV/VCR

SCH–9


VCC
D1
R1 2
Q1
R2 220
VCC
BATT.+
BATT.–
D2
C6 100/10
R8 100
C2 100/10
C3 0.1/50
C1 220/25
X1 4M
C4 33p
C5 33p
R3 8.2k
D3
D4
C7 100p
R4 4.7k
R5 33k
IC1
34 SEN6
35 SEN7
36 RMOUT
37 VccR
38 Vcc
39 XIN
40 XOUT
41 Vss1
42 REN
43 RMIN
44 CMKOUT
33 SEN5
32 SEN4
31 SEN3
30 SEN2
29 SEN1
28 SEN0
27 SCN9
26 SCN8
25 SCN7
24 SCN6
23 SCN5
22 SCN4
21 SCN3
20 SCN2
19 SCN1
18 SCN0
17 RESET
16 TEST2
15 TEST1
14 PA7
13 PA6
12 PA5
1 CHKIN
2 PB0/SI
3 PB1/SO
4 PB2/SCK
5 PB3/EXTH
6 Vss2
7 PA0
8 PA1
9 PA2
10 PA3
11 PA4
R7 200
D6
VCC
S101 VIDEO/AUDIO
S102 (2/2) RESET
R6 100k
D5
VCC
C8 0.1/50
IC2
1
2(V.D)
3
SEN0
SEN1
SEN2
SEN3
SEN4
SEN5
SEN6
SEN7
SCN0
SCN1
SCN2
SCN3
SCN4
SCN5
SCN6
S102 (1/2)
S103
S35 S15 S11 S3 S27 S23 S39 S43
S34 S14 S6 S7 S26 S22 S38 S47
S44 S19 S13 S8 S32 S24 S41 S46
S29 S18 S10 S2 S31 S21 S37 S42
S36 S16 S12 S4 S28 S20 S40 S51
S49 S5 S48 S50 S45
S33 S17 S9 S1 S30 S25

IC1	AZC1841
IC2	PST9121N
Q1	2SC3265
D1	SE303A-C
D2, D4, D5	RLS73
D3	SPS-503C-3
D6	SLC-22VR
X1	FCR4.0MC3

9.2 FOR CU−VSX082 (AXD1384)

■ SCHEMATIC DIAGRAM

NOTE)

JP2 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

JP3 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning.
This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

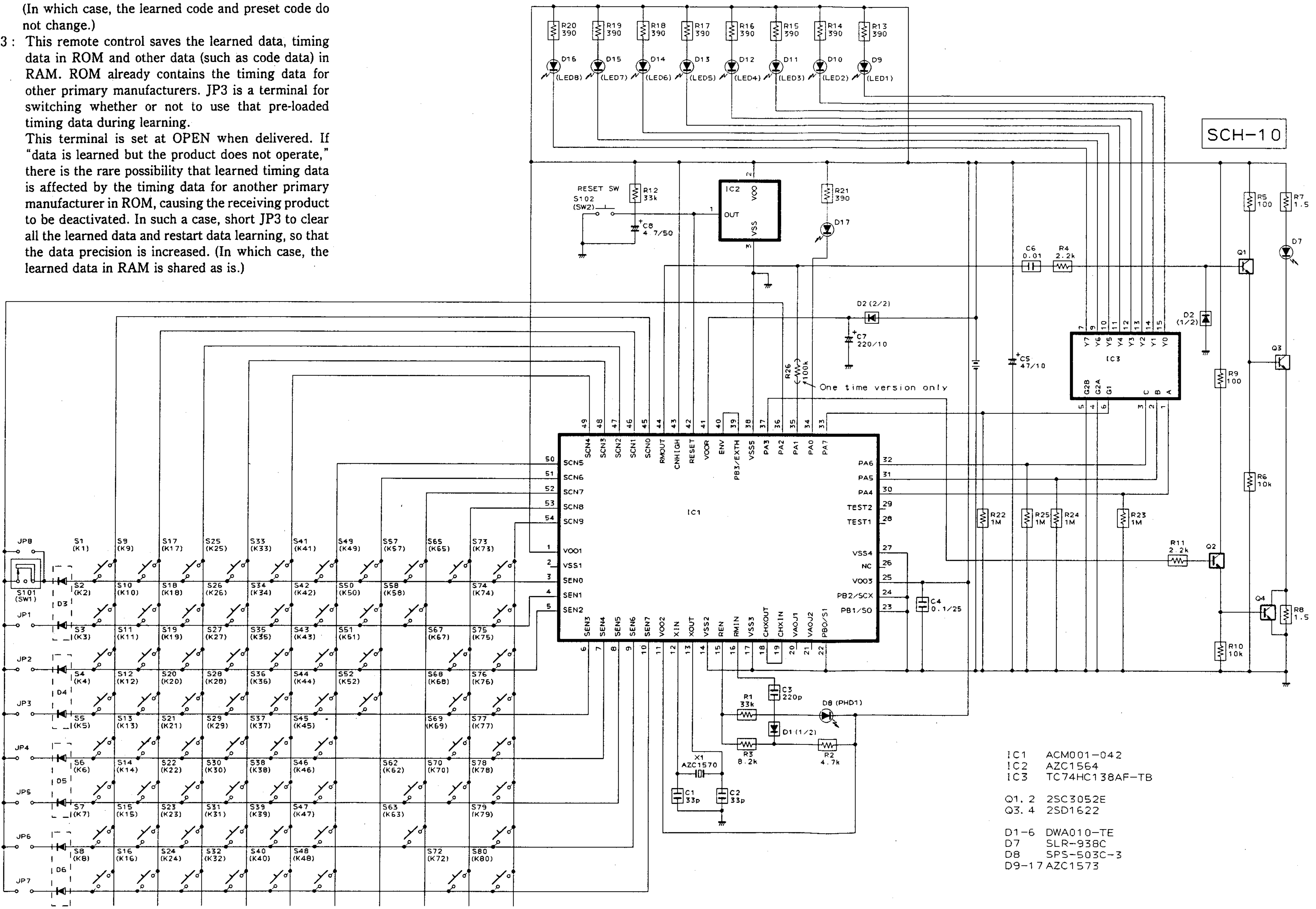
NOTE

▨ : Indicates a chip resistor.

▨ : Indicates a chip capacitor.

▨ : Indicates a chip transistor.

▨ : Indicates a chip diode.


SCH−10
R20 390
R19 390
R18 390
R17 390
R16 390
R15 390
R14 390
R13 390
D16 (LED8)
D15 (LED7)
D14 (LED6)
D13 (LED5)
D12 (LED4)
D11 (LED3)
D10 (LED2)
D9 (LED1)
RESET SW
S102 (SW2)
R12 33k
C8 4.7/50
IC2
VDD
OUT
VSS
R21 390
D17
C6 0.01
R4 2.2k
R5 100
R7 1.5
D7
Q1
D2 (2/2)
C7 220/10
R26 100k
One time version only
C5 47/10
D2 (1/2)
IC3
Y7 Y6 Y5 Y4 Y3 Y2 Y1 Y0
G2B G2A G1 C B A
Q3
R9 100
R6 10k
IC1
SCN4 SCN3 SCN2 SCN1 SCN0 RMOUT CNHIGH RESET VDDR ENV PB3/EXTH VSS5 PA3 PA2 PA1 PA0 PA7
SCN5 SCN6 SCN7 SCN8 SCN9 VDD1 VSS1 SEN0 SEN1 SEN2
PA6 PA5 PA4 TEST2 TEST1 VSS4 NC VDD3 PB2/SCX PB1/SO
SEN3 SEN4 SEN5 SEN6 SEN7 VDD2 XIN XOUT VSS2 REN RMIN VSS3 CHXIN CHXOUT VAOJ1 VAOJ2 PB0/SI
C4 0.1/25
R22 1M
R25 1M
R24 1M
R23 1M
R11 2.2k
Q2
Q4
R8 1.5
R10 10k
C3 220p
D8 (PHD1)
R1 33k
D1 (1/2)
R3 8.2k
R2 4.7k
X1 AZC1570
C1 33p
C2 33p
JP8
S101 (SW1)
JP1 JP2 JP3 JP4 JP5 JP6 JP7
D3 D4 D5 D6
S1 (K1) S9 (K9) S17 (K17) S25 (K25) S33 (K33) S41 (K41) S49 (K49) S57 (K57) S65 (K65) S73 (K73)
S2 (K2) S10 (K10) S18 (K18) S26 (K26) S34 (K34) S42 (K42) S50 (K50) S58 (K58) S74 (K74)
S3 (K3) S11 (K11) S19 (K19) S27 (K27) S35 (K35) S43 (K43) S51 (K51) S67 (K67) S75 (K75)
S4 (K4) S12 (K12) S20 (K20) S28 (K28) S36 (K36) S44 (K44) S52 (K52) S68 (K68) S76 (K76)
S5 (K5) S13 (K13) S21 (K21) S29 (K29) S37 (K37) S45 (K45) S69 (K69) S77 (K77)
S6 (K6) S14 (K14) S22 (K22) S30 (K30) S38 (K38) S46 (K46) S62 (K62) S70 (K70) S78 (K78)
S7 (K7) S15 (K15) S23 (K23) S31 (K31) S39 (K39) S47 (K47) S63 (K63) S79 (K79)
S8 (K8) S16 (K16) S24 (K24) S32 (K32) S40 (K40) S48 (K48) S72 (K72) S80 (K80)

IC1	ACM001−042
IC2	AZC1564
IC3	TC74HC138AF−TB
Q1. 2	2SC3052E
Q3. 4	2SD1622
D1−6	DWA010−TE
D7	SLR−938C
D8	SPS−503C−3
D9−17	AZC1573

SWITCHES

S101 : CENT. · BAL. / REAR · REAR BAL.
S102 : RESET
S1 : VCR1
S2 : VCR2
S3 : LD
S4 : TV
S5 : CD
S6 TUNER
S7 : DECK Ⅰ
S8 : DECK Ⅱ
S9 : DAT
S10 : MODE CHECK
S11 : LEARN
S12 : EDIT
S13 : MULTI COMMAND
S14 : M.CLEAR
S15 : POWER
S16 : ⏮
S17 : REC
S18 : ⏭
S19 : ◀◀
S20 : ◀ (SEARCH)
S21 : ▶▶
S22 : ⏸
S23 : ■
S24 : ▶
S25 : TV/VCR (+10)
S26 : SELECT (DISP)
S27 : TV FUNC (BAND)
S28 : 1
S29 : 2
S30 3
S31 : 4
S32 : 5
S33 : 6
S34 : 7
S35 : 8
S36 : 9
S37 : 10/0
S38 : 11/PGM
S39 : 12/CLEAR
S40 : TV VOL/DISC SEL +
S41 : TV VOL/DISC SEL −
S42 : FREQ/CH (∧)
S43 : FREQ/CH (V)
S44 : RECEIVER POWER
S45 : AUTO SOURCE CONTROL 1
S46 : AUTO SOURCE CONTROL 2
S47 : SLEEP
S48 : VCR/TAPE1
S49 : PHONO
S50 : TUNER
S51 : LD
S52 : CD
S57 : TAPE2 MONITOR
S58 : RETURN
S62 : S.BASS
S63 : SIMULATED STEREO
S65 : TEST TONE
S67 : MUTING
S68 : SURR MODE
S69 : 3CH LOGIC
S70 : CENTER MODE
S72 : REAR LEVEL +
S73 : CENTER LEVEL +
S74 : EFFECT LEVEL +
S75 : REAR LEVEL −
S76 : CENTER LEVEL −
S77 : DELAY TIME
S78 : EFFECT LEVEL −
S79 : MASTER VOLUME +
S80 : MASTER VOLUME −

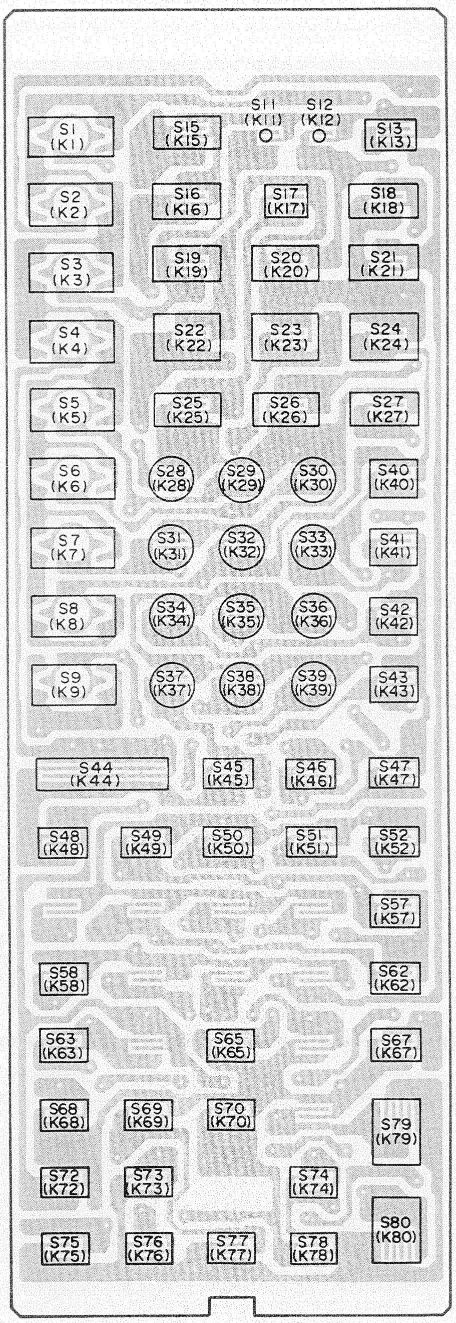
PCB PATTERN

: Indicates a chip resistor.

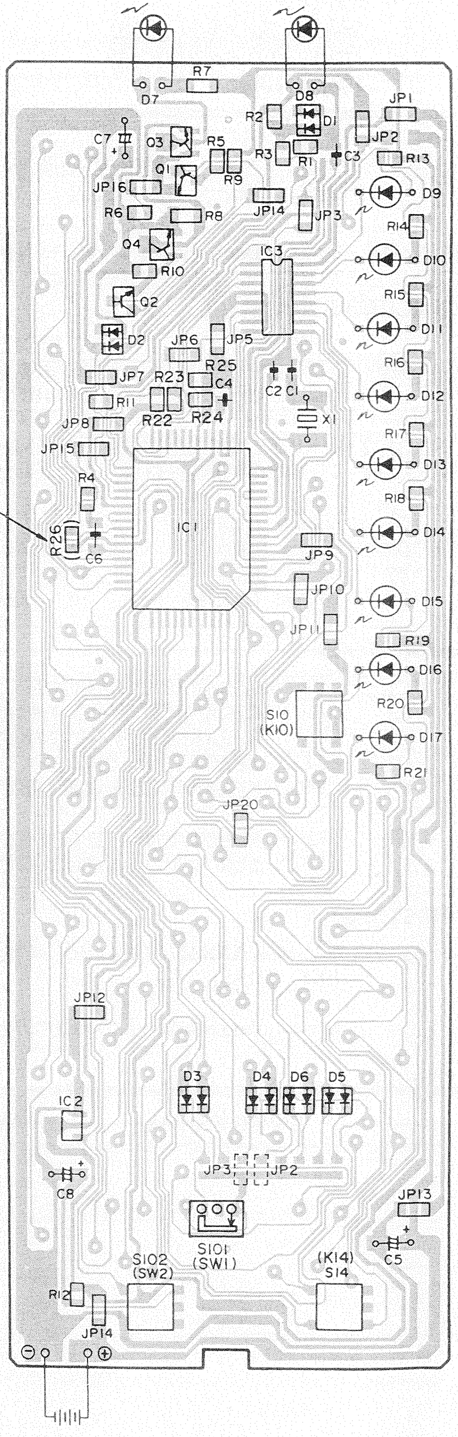
: Indicates a chip capacitor.

: Indicates a chip transistor.

: Indicates a chip diode.


S1 (K1)
S15 (K15)
S11 (K11)
S12 (K12)
S13 (K13)
S2 (K2)
S16 (K16)
S17 (K17)
S18 (K18)
S3 (K3)
S19 (K19)
S20 (K20)
S21 (K21)
S4 (K4)
S22 (K22)
S23 (K23)
S24 (K24)
S5 (K5)
S25 (K25)
S26 (K26)
S27 (K27)
S6 (K6)
S28 (K28)
S29 (K29)
S30 (K30)
S40 (K40)
S7 (K7)
S31 (K31)
S32 (K32)
S33 (K33)
S41 (K41)
S8 (K8)
S34 (K34)
S35 (K35)
S36 (K36)
S42 (K42)
S9 (K9)
S37 (K37)
S38 (K38)
S39 (K39)
S43 (K43)
S44 (K44)
S45 (K45)
S46 (K46)
S47 (K47)
S48 (K48)
S49 (K49)
S50 (K50)
S51 (K51)
S52 (K52)
S57 (K57)
S58 (K58)
S62 (K62)
S63 (K63)
S65 (K65)
S67 (K67)
S68 (K68)
S69 (K69)
S70 (K70)
S79 (K79)
S72 (K72)
S73 (K73)
S74 (K74)
S80 (K80)
S75 (K75)
S76 (K76)
S77 (K77)
S78 (K78)

One time version only


D7
R7
D8
D1
R2
JP1
JP2
C7
Q3
R5
R3
R1
C3
R13
Q1
R9
JP16
D9
R6
R8
JP14
JP3
R14
Q4
D10
R10
IC3
Q2
R15
D11
D2
JP6
JP5
R16
R25
JP7
R23
C4
C2
C1
D12
R11
R22
R24
X1
JP8
R17
JP15
D13
R4
R18
R26
IC1
D14
C6
JP9
JP10
D15
JP11
R19
D16
S10 (K10)
R20
D17
R21
JP20
JP12
D3
D4
D6
D5
IC2
JP3
JP2
C8
JP13
S101 (SW1)
S102 (SW2)
(K14) S14
C5
R12
JP14
⊖
⊕

■ PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 ························ RD1/8PM $\boxed{5}\ \boxed{6}\ \boxed{1}$ J
47kΩ → 47 × 10^3 → 473 ························ RD1/4PS $\boxed{4}\ \boxed{7}\ \boxed{3}$ J
0.5Ω → 0R5 ··· RN2H $\boxed{0}\ \boxed{R}\ \boxed{5}$ K
1Ω → 010 ·· RS1P $\boxed{0}\ \boxed{1}\ \boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10^1 → 5621 ················· RM1/4PC $\boxed{5}\ \boxed{6}\ \boxed{2}\ \boxed{1}$ F

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1	μ−COM	ACM001−042
	IC2	IC	AZC1564
	IC3	LOGIC IC	TC74HC138AF−TB
	Q1, 2	CHIP TRANSISTOR	2SC3052E
	Q3, 4	TRANSISTOR	2SD1622
	D1−6	DIODE	DWA010−TE
	D9−17	LED	AZC1573
	D7	LED	SLR−938C
	D8	DIODE	SPS−503C−3
CAPACITORS			
	C1, 2	CERAMIC CAPACITOR	CCDSL330J50
	C3	CERAMIC CAPACITOR	CCDSL221J50
	C4	CERAMIC CAPACITOR	CKDYX104M25
	C5	ELECT. CAPACITOR	CEAS470M10
	C6	CERAMIC CAPACITOR	CKDYB103K50
	C7	ELECT. CAPACITOR	CEAS221M10
	C8	ELECT. CAPACITOR	CEAS4R7M50
RESISTORS			
	R7, 8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	AZC1570

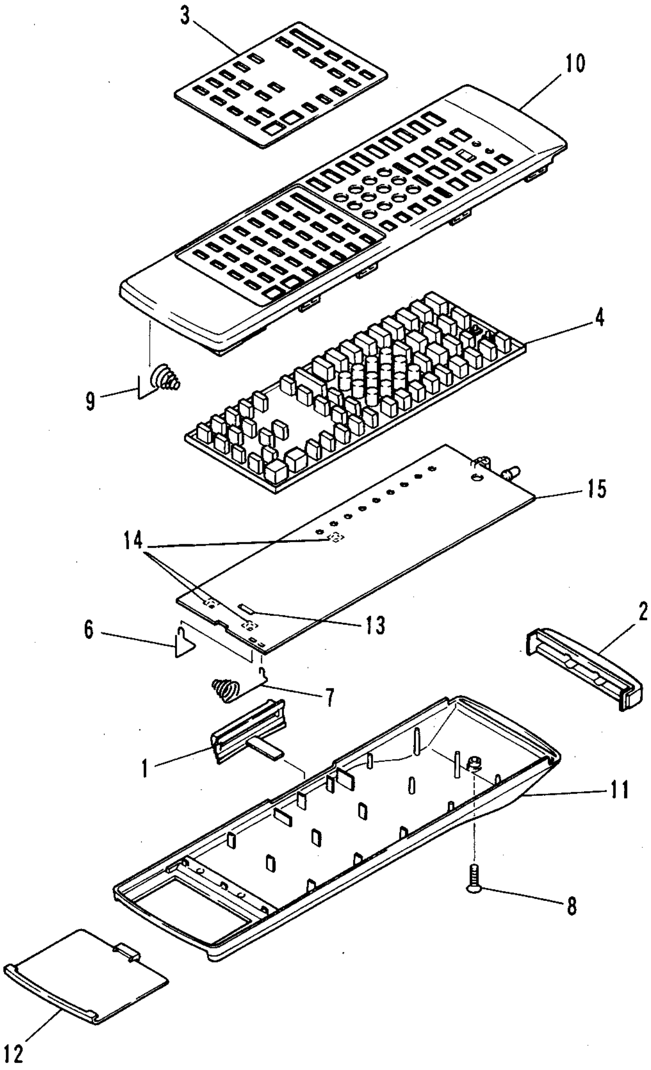
EXPLODED VIEW AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	PLATE	AZA1980
	4	RUBBER SHEET	AZA1981
	5	....	
	6	TERMINAL (+)	AZB1327
	7	TERMINAL (−)	AZB1328
	8	SCREW	AZB1329
	9	TERMINAL (C)	AZB1330
	10	CASE (A)	AZN2253
	11	CASE (B)	AZN2090
	12	BATTERY COVER	AZN2091
	13	SLIDE SW (S101)	AZS1132
	14	TACT SW (S102, S10, S14)	AZS1133
NSP	15	P. C. BOARD	AZW1130



10. FOR VSX−D503/KUXJ, SDXJ AND VSX−D513S/KCXJ TYPES

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

10.1 FOR VSX−D503S/KUXJ

■ CONTRAST OF MISCELLANEOUS PARTS

VSX−D503S/KUXJ and KU have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSX−D503S/KU	VSX−D503S/KUXJ	
	FM/AM TUNER MODULE	AXQ1012	AXQ3112	
⚠	FU3, FU4 (4A/125V)	AEK−125	REK1066	
⚠	AC power cord	ADG1126	ADG1152	
	Binder	AEC−093	....	
NSP	Binder	....	Z09−057	Corresponds to AEC−093
NSP	PCB holder	AEC1097	AEC1583	
NSP	PCB mold	AMR1525	....	
	PCB mold	....	AMR2533	Corresponds to AMR1525
NSP	PCB mold	AMR2115	....	
	PCB mold	....	AMR2534	Corresponds to AMR2115
	Front pad	AHA2029	AHA1665	
	Rear pad	AHA2030	AHA1666	
	Packing case	AHD2744	AHD2675	
	Packing sheet	AHG1016	AHG1210	
NSP	Poly bag	....	AHG1217	

FM/AM TUNER MODULE

AXQ3112 and AXQ1012 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AXQ1012	AXQ3112	
	AM RF tuning block	AXX1041	AXX1025	

10.2 FOR VSX−D503S/SDXJ

■ CONTRAST OF MISCELLANEOUS PARTS

VSX−D503S/SDXJ and SD have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSX−D503S/SD	VSX−D503S/SDXJ	
	FM/AM TUNER MODULE	AXQ1012	AXQ3112	∗1
⚠	FU1−FU4 (4A/125V)	AEK−125	REK1066	
	Binder	AEC−093	....	
NSP	Binder	....	Z09−057	Corresponds to AEC−093
NSP	PCB holder	AEC1097	AEC1583	
NSP	PCB mold	AMR1525	....	
	PCB mold	....	AMR2533	Corresponds to AMR1525
NSP	PCB mold	AMR2115	....	
	PCB mold	....	AMR2534	Corresponds to AMR2115
	Front pad	AHA2029	AHA1665	
	Rear pad	AHA2030	AHA1666	
	Packing case	AHD2746	AHD2677	
	Packing sheet	AHG1016	AHG1210	
NSP	Poly bag	....	AHG1217	

∗1 : Concerning the differences between AXQ1012 and AXQ3112, refer to page 66.

10.3 FOR VSX−D513S/KCXJ

■ CONTRAST OF MISCELLANEOUS PARTS

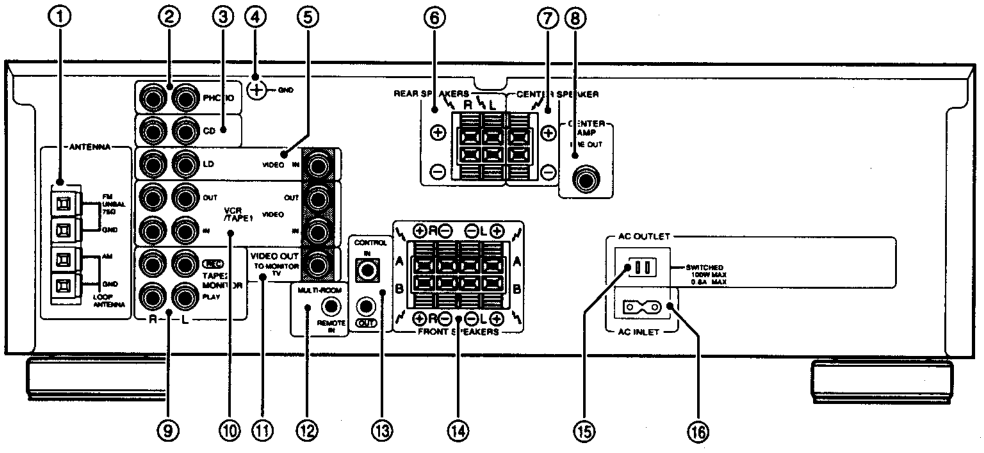
VSX−D513S/KCXJ and KC have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSX−D513S/KC	VSX−D513S/KCXJ	
	FM/AM TUNER MODULE	AXQ1012	AXQ3112	∗1
⚠	FU3, FU4 (4A/125V)	AEK−125	REK1066	
	Binder	AEC−093	....	
NSP	Binder	....	Z09−057	Corresponds to AEC−093
NSP	PCB holder	AEC1097	AEC1583	
NSP	PCB mold	AMR1525	....	
	PCB mold	....	AMR2533	Corresponds to AMR1525
NSP	PCB mold	AMR2115	....	
	PCB mold	....	AMR2534	Corresponds to AMR2115
	Front pad	AHA2029	AHA1665	
	Rear pad	AHA2030	AHA1666	
	Packing case	AHD2745	AHD2676	
	Packing sheet	AHG1016	AHG1210	
NSP	Poly bag	....	AHG1217	

∗1 : Concerning the differences between AXQ1012 and AXQ3112, refer to page 66.

11. PANEL FACILITIES

- Illustration shows U.S. model.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⑮
⑯
ANTENNA
FM UNBAL 75Ω
GND
GND
LOOP ANTENNA
PHONO
GND
CD
LD
VIDEO IN
OUT
VCR /TAPE1
VIDEO
IN
REC TAPE2 MONITOR PLAY
VIDEO OUT TO MONITOR TV
R
L
MULTI-ROOM REMOTE IN
CONTROL IN
OUT
REAR SPEAKERS
R
L
CENTER SPEAKER
CENTER AMP PRE OUT
A
B
FRONT SPEAKERS
AC OUTLET
SWITCHED 100W MAX 0.8A MAX
AC INLET

① FM/AM ANTENNA terminals

Connect to FM and AM antennas.

② PHONO input jacks

Connect to the output cables from a turntable.

③ CD input jacks

Connect to the output jacks of a compact disc player.

④ GND terminal

Connect the turntable ground lead to this terminal.
Loosen the screw, connect the ground lead, and then tighten the screw.

⑤ LD input jacks

Connect to an LD player's output jacks (audio, video).

⑥ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

Use speakers with impedance of 8 Ω to 16 Ω.

⑦ CENTER SPEAKER terminals

Connect the center speaker to these terminals.
Use center speakers with impedance of 8 Ω to 16 Ω.

⑧ CENTER AMP PRE OUT jack

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

⑨ TAPE 2 MONITOR jacks

Connect to audio components such as a second cassette deck or graphic equalizer.

⑩ VCR/TAPE 1 jacks

Connect to the first cassette deck or to a VCR. With a VCR, also connect the video jacks.

⑪ VIDEO OUT (TO MONITOR TV) jack

Connect to a monitor TV.

⑫ MULTI-ROOM REMOTE IN jack

Connect to the separately sold MR-100 Multi-Room remote control unit.

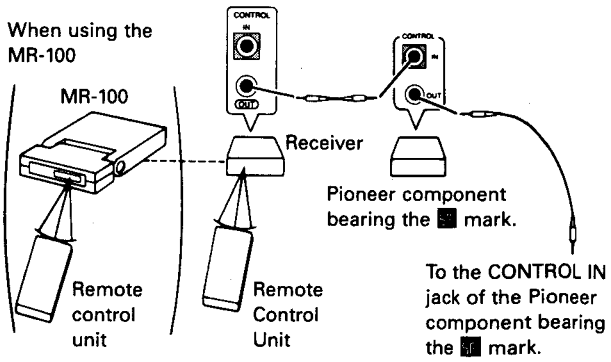
⑬ CONTROL IN/OUT jacks

IN : Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.

OUT : Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:

The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


When using the MR-100
MR-100
CONTROL IN
OUT
CONTROL IN
OUT
Receiver
Pioneer component bearing the ■ mark.
Remote control unit
Remote Control Unit
To the CONTROL IN jack of the Pioneer component bearing the ■ mark.

⑭ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.
B: Connect to the second set of speakers.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other. Use speakers with impedance of 8 Ω to 16 Ω.

⑮ AC OUTLET jack

[SWITCHED 100 W (0.8 A) MAX]

Power supplied through this outlet is turned on and off by the receiver's POWER switch. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A).

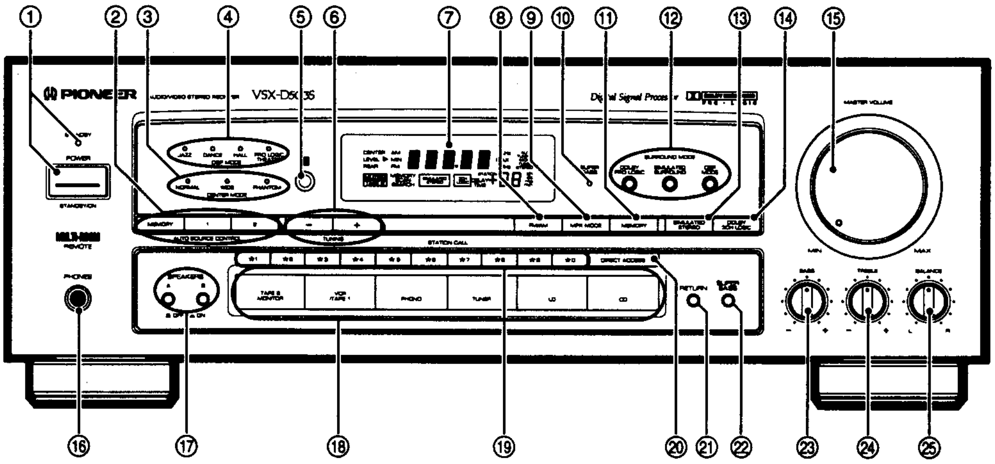
NOTE:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to this AC OUTLET in order to avoid overheating and fire risk.*
  This can cause the receiver to malfunction.

CAUTION:
DO NOT CONNECT MONITOR OR TV SET.

⑯ AC INLET jack

Connect the supplied power cord here.



① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON	: When set to the ON position, power is supplied and the unit becomes operational.
STANDBY	: When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 6 seconds.

② AUTO SOURCE CONTROL buttons

1, 2 buttons:

These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:

Use when memorizing settings to a 1, 2 button.

③ CENTER MODE indicators

④ DSP MODE indicators

⑤ Remote sensor window

⑥ TUNING buttons

+: Performs tuning from the currently displayed station frequency in ascending frequency order.

−: Performs tuning in order of descending frequencies.

⑦ Display section

⑧ FM/AM button

Use this to switch between FM and AM frequency band reception.

⑨ MPX MODE button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:
Use if the signal is weak and there is too much noise when receiving an FM stereo broadcast. Reception becomes monaural, but noise is reduced.

NOTE:
This button has no effect on reception of AM broadcasts.

⑩ SUPER BASS indicator

Lights when SUPER BASS is ON.

⑪ MEMORY button

Pressing this button will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode.

⑫ SURROUND MODE buttons

⑬ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, AM or TV broadcasts).
"SIMULATED STEREO" appears on the display section.

NOTE:
This effect is not produced through the rear speakers.

⑭ DOLBY 3CH LOGIC button

This switches on and off the DOLBY 3CH LOGIC. When set to the on position, "3CH LOGIC" is displayed.

⑮ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center, and rear speakers.

⑯ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

⑰ SPEAKERS buttons (A, B) ▀OFF ▄ON

ON/OFF switches for the A and B speaker systems.

NOTE:
No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑱ Input selector buttons

TAPE 2 MONITOR	: Press when performing playback on a second cassette deck and when monitoring recording.
VCR/TAPE 1	: Press when performing playback on a VCR unit or cassette deck.
PHONO	: Press when playing records on a turntable.
TUNER	: Press when listening to radio broadcasts.
LD	: Press when performing playback on an LD player.
CD	: Press when playing compact discs on a CD player.

⑲ STATION CALL buttons

Up to 30 FM or AM stations can be preset at random.
These buttons are used to preset and recall desired broadcasting stations, FM AUTO/MONO mode.

⑳ DIRECT ACCESS tuning button

When this button is pressed, the STATION CALL buttons function as ten-key number buttons for direct input of the desired reception frequency. Press again to cancel this mode.

㉑ RETURN button

Press this button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

- TAPE 2 MONITOR .... Off
- SURROUND MODE .... Off
- MUTING .... Off
- FUNCTION .... TUNER

Returns you to the last station you were receiving. When reception is not possible, auto tuning (UP) starts from that frequency.

NOTE:
If no sound is output after the RETURN button is pressed, make sure that SPEAKERS buttons are turned on.

㉒ SUPER BASS button

Switch ON when you want to boost bass. The SUPER BASS indicator lights.

㉓ BASS control

Use to adjust the low-frequency level.
Turn clockwise to boost bass, and counterclockwise to attenuate bass.

㉔ TREBLE control

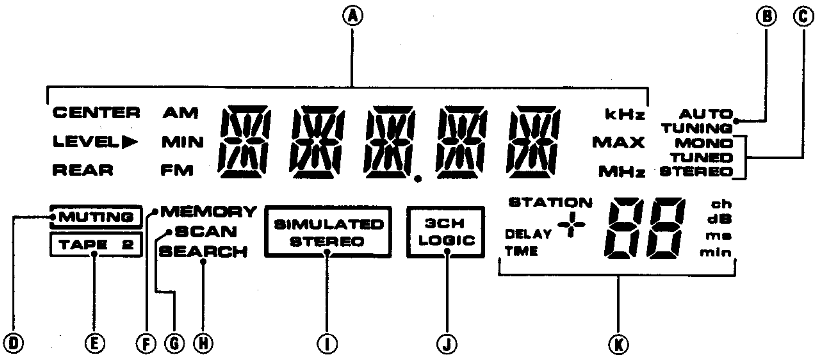
Use to adjust the high-frequency level.
Turn clockwise to boost treble, and counterclockwise to attenuate treble.

㉕ BALANCE control

Use to adjust the sound volume balance between left and right speakers.

L: Decrease the sound on the right side.
R: Decrease the sound on the left side.
Usually, left and right volume levels should be the same.

DISPLAY SECTION


Ⓐ
Ⓑ
Ⓒ
CENTER
LEVEL▶
REAR
AM
MIN
FM
kHz
MAX
MHz
AUTO
TUNING
MONO
TUNED
STEREO
MUTING
TAPE 2
MEMORY
SCAN
SEARCH
SIMULATED
STEREO
3CH
LOGIC
STATION
DELAY
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dB
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Ⓐ Character/Level display

- Displays function, frequency, and "SLEEP".
- It also displays the level settings during adjustment. During level display, MIN and MAX light.

Ⓑ AUTO TUNING indicator

Lights up when in the auto tuning mode.

Ⓒ Tuning indicator

TUNED	: Lights up when a station is tuned in during TUNER operation.
MONO	: Lights up when the FM MONO mode is selected with the MPX MODE button.
STEREO	: Lights up when a stereo FM broadcast is being received.

Ⓓ MUTING indicator

Flashes when MUTING is ON.

Ⓔ TAPE 2 indicator

Lights up when the input selector is set to TAPE 2 MONITOR ON.

Ⓕ MEMORY indicator

When presetting stations, this lights when the MEMORY button is pressed.

Ⓖ SCAN indicator

Lights up during memory scan operation.

NOTE:

Memory scan cannot be operated in this unit.

Ⓗ SEARCH indicator

Lights during Return mode operation.

Ⓘ SIMULATED STEREO indicator

Ⓙ DOLBY 3CH LOGIC indicator

Ⓚ STATION/DELAY TIME/LEVEL/SLEEP TIME display

- Indicates the channel (ch) selected with the STATION CALL buttons.
- Indicates delay time (ms) when using SIMULATED SURROUND or DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).

12. SPECIFICATIONS

Amplifier section

Continuous average power output of 110 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

Continuous Power Output (in Stereo Mode)	
Front	110 W + 110 W (20 Hz to 20 kHz, 0.09 %, 8 Ω)
Continuous Power Output (When using SURROUND MODE)	
Rear only driven	20 W + 20 W (1 kHz, 0.8 %, 8 Ω)
Front and Center driven	
Front	75 W + 75 W (1 kHz, 0.8 %, 8 Ω)
Center (Only with DOLBY PRO LOGIC SURROUND)	75 W (1 kHz, 0.8 %, 8 Ω)
Dynamic Power (2 Ω/ 4 Ω/8 Ω)	265 W/240 W/170 W
Input (Sensitivity/Impedance)	
PHONO MM	2.8 mV/47 kΩ
CD, VCR/TAPE 1, TAPE 2, LD	200 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1 kHz)**	
PHONO MM	100 mV
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ±0.5 dB
CD, VCR/TAPE 1, TAPE 2, LD	10 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)	
VCR/TAPE 1 REC, TAPE 2 REC	200 mV/2.2 kΩ
Tone Control	
BASS	±8 dB (100 Hz)
TREBLE	±8 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	72 dB
CD, VCR/TAPE 1, TAPE 2, LD	96 dB
Signal-to-Noise Ratio (EIA, at 1 W 1kHz)	
PHONO MM	75 dB
CD, VCR/TAPE 1, TAPE 2, LD	79 dB

* ***Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.***

** ***Measured by Audio Spectrum Analyzer.***

VIDEO Section

Input (Sensitivity/Impedance)	
VCR/TAPE 1, LD	1 Vp-p/75 Ω
Output (Level/Impedance)	
VCR/TAPE 1, MONITOR	1 Vp-p/75 Ω
Frequency Response	
VCR/TAPE 1, LD → MONITOR	5 Hz to 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	55 dB
Cross Talk	55 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono: 11.2 dBf, IHF (1.0 µV/75 Ω)
50 dB Quieting Sensitivity	Mono: 16.8 dBf Stereo: 38.6 dBf
Signal-to-Noise Ratio	Mono: 73 dB (at 85 dBf) Stereo: 70 dB (at 85 dBf)
Distortion	Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity	60 dB (400 kHz)
Stereo Separation	40 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz ±1 dB
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	
U.S. model	530 kHz to 1,700 kHz
Multi-voltage model	531 kHz to 1,602 kHz (9 kHz step) 530 kHz to 1,700 kHz (10 kHz step)
Sensitivity (IHF, Loop antenna)	350 µV/m
Selectivity	25 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	
U.S. model	AC 120 V, 60 Hz
Multi-voltage model	AC 110/120-127/220/240 V, 50/60 Hz
Power Consumption	
U.S. model	270 W
Multi-voltage model	870 W
Dimensions	420 (W) x 147 (H) x 349 (D) mm
Weight (without package)	
U.S. model	9.2 kg
Multi-voltage model	9.3 kg

Furnished Parts

FM Antenna	1
AM Loop Antenna	1
Dry Cell Batteries	
size "AAA" (IEC LR03/AM-4)	2
Remote Control Unit	1
Operating Instructions	1
Power Cord	1

NOTE:

Specifications and the design are subject to possible modifications without notice due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.